

Converbs in Cross-Linguistic Perspective



Empirical Approaches to Language Typology

13

Editors

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Converbs in Cross-Linguistic Perspective

Structure and Meaning of Adverbial Verb Forms
– Adverbial Participles, Gerunds –

edited by

Martin Haspelmath
Ekkehard König

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Preface

This volume grew out of a workshop on converbs organized by the editors at the Annual Meeting of the German Linguistic Society (DGfS) in Aachen in 1991. The organization of this workshop was one of the activities pursued by the editors within the context of the ESF Programme "Typology of Languages in Europe". A major portion of the papers published in this volume (Bisang, Johanson, Kortmann, Podlesskaya, Weiss) were presented at this workshop. The range of languages discussed, however, was not wide enough for the cross-linguistic study envisaged by us and therefore other colleagues who had already published on the subject were invited to contribute chapters on certain languages to this volume. In this way, the chapters by Tikkanen, Bergelson and Kibrik, de Groot, I. Nedjalkov and Slobin were added. Finally, an English translation of one of the first cross-linguistic studies of converbs (V. Nedjalkov 1990) was included as well as two general surveys on the formal properties (Haspelmath) and semantic properties (König) of converbs. It is especially in these two chapters that the results of earlier work on converbs is discussed and summarized.

Converbs (*gerunds*, *gérondifs*, *adverbial participles*) have received a great deal of attention in the last fifteen years or so. The vast majority of the relevant studies, however, are on individual languages and only very modest beginnings have been made in the analysis of these constructions from a cross-linguistic perspective. One reason for this situation certainly was the confusion created by the use of several different terms (*gerund*, *gérondif*, *adverbial participle*, *converb*, *sentence equivalents*, etc.) for the relevant construction, which thus stood in the way of recognizing the similarity or even identity of properties shared by converb constructions across languages.

The goal of this book is, therefore, to map out the space of variation in the formal and semantic properties of converb constructions within an interesting sample of the world's languages and to make the reader see common features where traditionally none had been recognized. We thus hope to provide the foundation for further typological work in this domain.

Finally, we would like to thank Bernard Comrie for his detailed criticism and helpful comments on all the papers in this volume.

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Contents

Preface	v
Contributors	vii
 The converb as a cross-linguistically valid category	
Martin Haspelmath	1
 The meaning of converb constructions	
Ekkehard König	57
 Some typological parameters of converbs	
Vladimir P. Nedjalkov	97
 Verb serialization and converbs—differences and similarities	
Walter Bisang	137
 Adverbial participial clauses in English	
Bernd Kortmann	189
 Russian converbs: A typological outline	
Daniel Weiss	239
 The Hungarian converb or verbal adverbial in <i>-va/-ve</i>	
Casper de Groot	283
 On Turkic converb clauses	
Lars Johanson	313
 Converbs in Turkish child language: The grammaticalization of event coherence	
Dan I. Slobin	349
 The system of switch-reference in Tuva: Converbial and masdar-case forms	
Mira B. Bergelson–Andrej A. Kibrik	373
 Contextual and specialized converbs in Lezgian	
Martin Haspelmath	415
 Converbs in Evenki	
Igor' V. Nedjalkov	441
 Converbs in Japanese	
Vladimir M. Alpatov–Vera Podlesskaya	465

Burushaski converbs in their South and Central Asian areal context	
Bertil Tikkanen	487
A bibliography of converbs	
Martin Haspelmath	529
Index of authors	549
Index of subjects	555
Index of languages	563

The converb as a cross-linguistically valid category*

Martin Haspelmath

1. Towards the cross-linguistic study of converbs

The grammars of human languages differ widely and in fascinating ways. Nevertheless, again and again we come across striking structural similarities that allow us to identify a grammatical phenomenon of an unfamiliar language with a phenomenon in a well-studied language. While it is true that grammatical descriptions of unfamiliar languages have always suffered from a certain extent of harmful Latinocentrism or (later) Eurocentrism, many of the equations between familiar European grammatical phenomena and phenomena of unfamiliar, especially non-European languages have turned out to be essentially correct. All over the world we find categories such as noun and verb, singular and plural, nominative and accusative, future and past tense, and their worldwide cross-linguistic study has led to important new insights in grammatical theory. Very few if any of these categories are universal in the sense that they occur in every language, but many are *universally applicable* or *cross-linguistically valid* in the sense that they are found in various languages irrespective of their genetic and areal connections, and must be seen as belonging in some way or other to universal grammar.¹

One such cross-linguistically recurrent category, the *converb*, is the topic of this book. The following are some examples of converbs from all over the world.

- (1) Modern Greek
I kopéla tón kitak-s-e xamojel-óndas.
the girl him look-AOR-3SG smile-CONV
'The girl looked at him smiling.'
- (2) Khalkha Mongolian
Xot-od or-ž nom aw-aw.
town-DAT go-CONV book buy-PAST
'Going to town I bought a book.'
- (3) Portuguese
Despenhou-se um avião militar, morr-endo o piloto.
crashed a plane military die-CONV the pilot
'A military plane crashed, and the pilot was killed'. (lit. '... the pilot dying'.)

- (4) Hindi-Urdu
Banie ke bete ne ciṭṭhii likh-kar ḍaak mē ḍaal-ii.
 grocer GEN son ERG letter[F] write-CONV box in put-PAST.F
 'The grocer's son wrote and posted a letter.' (lit. '... writing a letter, posted it.')
- (5) Lithuanian
Saul-ei tek-ant, pasiek-ė-m kryžkel-ę.
 sun-DAT rise-CONV reach-PAST-1PL cross.roads-ACC
 'When the sun rose, we reached a crossroads.' (lit. 'The sun rising ...')
- (6) Korean
Achim mek-ko hakeyo ey kassey yo.
 breakfast eat-CONV school to went PT
 'I ate breakfast and went to school.'
- (7) Huallaga Quechua (Weber 1989: 304)
Aywa-ra-yka-r parla-shun.
 go-STAT-IMPF-CONV converse-1PL.INCL.IMPV
 'Let's converse as we go along.'
- (8) Diyari (Australian; Austin 1981: 318)
Nbulu puka thayi-rna, nbawu pali-rna warrayi.
 he:ERG food eat-CONV he:ABS die-CONV AUX
 'While eating some food, he died.'
- (9) Chukchi (Skorik 1977: 143)
Ajwe, ga-tajk-əma kupren, jaʔrat
 yesterday CONV-make-CONV net very
ta-peŋʔiwet-gʔek.
 1SG-become.tired-1SG.PAST.INTR
 'Yesterday, making the net, I became very tired.'

While converbs have been studied extensively in individual languages, there is very little typological, cross-linguistic research on converbs. Indeed, the converb has hardly been recognized as a cross-linguistically valid grammatical category up to now. This may have to do with the fact that there are no converbs in Latin or Classical Greek, and thus the framework of Western traditional grammar does not provide a term for this notion. Converbs in European languages are known by different names: "gerund", "gérondif", "(adverbial or indeclinable) participle", as well as other labels used in languages other than English. In

Russian, the term *deepričastie* is an unambiguous term for the Russian converbs, which has also been applied to the converb-rich languages of the Russian colonial areas of the Caucasus and northern and Central Asia. Thus, it is not surprising that the first typological studies of converbs appeared in Russian linguistics (Meščaninov 1945; Čeremisina 1977; Nedjalkov–Nedjalkov 1987; Nedjalkov 1990; but cf. also Masica 1976: ch. 4; Haiman 1985: chapter 4; König–van der Auwera 1990). Nedjalkov and Nedjalkov (1987) propose the use of the term *converb*, adopted from Altaic linguistics, for the cross-linguistically recurrent category exemplified above. For more discussion of terminology, see section 7 below.

In this paper, I deal with a number of general issues surrounding the morpho-syntax of converbs across languages. In section 2, the notion “converb” is defined and problems of the definition are discussed. Section 3 treats the formal make-up of converbs (3.1), subject reference (3.2), the phrasal or clausal status of converb constructions (3.3), criteria for subordination (3.4), and diachronic origins of converbs (3.5). In section 4, converbs are delimited from related constructions: copredicative participles (4.1), medial verbs (4.2), absolute constructions (4.3), and infinitival constructions (4.4). Section 5 gives an overview of converb control in a cross-linguistic perspective, and section 6 discusses the grammaticalization of converbal constructions.

What is mostly lacking from this paper are typological generalizations. What types of languages have converbs at all? How are the different types of converbs distributed across languages? There seems to be a correlation between converb prominence and object-verb word order, and there may also be areal factors (cf. Masica 1976), but it is not easy to get beyond these rather impressionistic observations. Much more research on converbs from languages of different families is needed to make progress with these questions. (A beginning is made for European languages in I. Nedjalkov [in press].)

2. Defining the notion converb

A converb is defined here as *a nonfinite verb form whose main function is to mark adverbial subordination*. Another way of putting it is that converbs are verbal adverbs, just like participles are verbal adjectives. Table 1 shows the parallels between the three types of derived verb forms that are used when the verb is used in a nonprototypical syntactic function.

Table 1. Derived verb forms with different word class status

<i>Word class:</i>	Noun	Adjective	Adverb
<i>Derived verb form:</i>	masdar ² (= verbal noun)	participle (= verbal adjective)	converb (= verbal adverb)
<i>Syntactic function:</i>	argument	adnominal modifier	adverbial modifier

The four components of the above definition (nonfinite, verb form, adverbial, subordination) will now be discussed in more detail. Three of them (nonfinite, adverbial, subordination) are not unproblematic and give rise to some borderline cases where the converb status of a verb form is not clear.

2.1. Verb form

A converb is a verb form that is part of the inflectional paradigm of verbs. Thus, a converb cannot be easily analyzed as a verb plus a complementizer or subordinator. Rather, the verb in the converb form is inherently subordinate. It has sometimes been suggested that converbs should be understood as combinations of verb plus complementizer (which happen to be tightly bound), but this is just an attempt to fit an unfamiliar phenomenon into the procrustean bed of the European language type, which strongly prefers adverbial conjunctions to converbs (cf. Kortmann [in press]).

Saying that a converb is a verb form also means rejecting Meščaninov's (1945) view that the converb (*deepričastie*) is a separate word class. Converbs never have the degree of autonomy that is associated with the status of lexemes, so they are clearly inflectional, not derivational forms.

2.2. Nonfinite

The converbs in examples (1) to (9) in section 1 lack specifications for tense (-aspect) and mood as well as for agreement with their arguments, and are thus *nonfinite*. However, both the criteriality of nonfiniteness for converbs and the very notion of (non-)finiteness are problematic.

In V. Nedjalkov's (1990, and in this volume) definition of the converb, nonfiniteness plays no role, so that finite verb forms which are used only in adverbial subordinate clauses also fall under the definition. The following sentences from Basque, Swahili and West Greenlandic Eskimo illustrate such verb forms.

- (10) Basque (Lafitte 1941: 408): conditional form
Ji-ten ba-da, ideki-ko d-io-zu.
 come-HAB COND-3SG.ABS open-FUT 3SG.ABS-3SG.DAT-2SG.ERG
 'If he comes, you will open (the door) for him.'

- (11) Swahili
I-ki-nyesha ha-tu-ta-kwenda sinema.
 G9-ADV-rain NEG-1PL-FUT-go movies
 'If it rains, we won't go to the movies.'
- (12) West Greenlandic (Fortescue 1984: 65): causative mood
Anurli-ssa-mmat aalla-ssa-nngil-agut.
 be.windy-FUT-CAUS.3SG leave-FUT-NEG-INDIC.1PL
 'Since it is going to be windy we won't leave.'

It is, of course, possible to define the term *converb* in this way, but I prefer a narrower definition because only a nonfinite adverbial subordination form could be said to be a "verbal adverb", and the term *converb* seems ideally suited to fill the "verbal adverb" position in Table 1. All verb forms that have traditionally been called "converbs", "gerunds", "adverbial participles" "conjunctive participles", etc. are nonfinite, and extending the term *converb* to finite subordination forms like those in (10) to (12) seems an unjustified departure from traditional usage.

But the notion of finiteness itself is not unproblematic (cf. Koptjevskaja-Tamm [1994] for some discussion). While in the classical languages Latin and Greek (for which the notion of finiteness was first developed) practically all verb forms are either specified for all finiteness features (aspect, tense, mood, subject agreement) or for none of them, this is by no means universally the case. Rather, the traditional concepts of finiteness and nonfiniteness are just two extreme points on a *scale of desententialization* (cf. Lehmann 1988: 200), and other languages may show various intermediate points on this scale. Most notably, verb forms may lack tense and mood specifications, but still have subject agreement. This is the case, for instance, with the Swahili *-ki*-form (cf. example [11]), and in the Portuguese "personal infinitive" (e.g. *para nós vermos* 'in order for us to see').

Another way in which the finite/nonfinite distinction may be blurred is when the converb is marked for possessor agreement with its subject. Not uncommonly, nonfinite verb forms do not allow the subject to be expressed in the usual way and require a possessive construction instead. This is quite normal with verbal nouns (cf. Koptjevskaja-Tamm 1993), but it also occurs with participles and converbs. In Ge'ez (ancient South Semitic), for example, converbs take person-number suffixes that are identical with possessive person-number suffixes, cf. Table 2 and example (13) (data from Lambdin 1978: 140–141).

Table 2. Ge'ez converb inflection and noun inflection for person-number (partial)

Converb:		Noun:	
<i>qatit-eya</i>	'I having killed'	<i>bagar-eya</i>	'my city'
<i>qatit-aka</i>	'you having killed'	<i>bagar-aka</i>	'your city'
<i>qatit-o</i>	'he having killed'	<i>bagar-o</i>	'his city'

- (13) Ge'ez
Nabir-eya tanāgar-ku mesl-ēhomu.
 sit.down:CONV-1SG.POSS talk-PERF.1SG with-3PL
 'Having sat down, I spoke with them.'

This form may still be regarded as completely nonfinite, because the converb inflection is clearly possessive. However, in some languages it is not so easy to tell whether person-number inflection is possessive or finite. Consider Evenki (Manchu-Tungusic), discussed by I. Nedjalkov in this volume, which presents a similar picture. Converbs that are not restricted to same-subject uses take the possessive suffixes, as in Table 3 and example (14).

Table 3. Evenki converb inflection and noun inflection for person-number (partial)

Converb		Noun:	
<i>baka-raki-v</i>	'after I found'	<i>d'u-v</i>	'my house'
<i>baka-raki-s</i>	'after you found'	<i>d'u-s</i>	'your house'
<i>baka-raki-n</i>	'after s/he found'	<i>d'u-n</i>	'his/her house'

- (14) Evenki (I. Nedjalkov [this volume], example [35 d])
Eme-reki-n hokto-du-tin nadan beje-l
 come-CONV-3SG.POSS road-DAT.LOC-3PL.POSS seven man-PL
hukle-d'ere-Ø.
 lie-PRES-3PL
 'When she came, (she saw) seven men were lying on their road.'

However, the possessive suffixes are also used in some clearly finite verb forms, e.g., in the perfect:

- (15) Evenki Perfect (partial) (I. Nedjalkov, this volume)
baka-ča-v 'I have found'
baka-ča-s 'you have found'
baka-ča-n 'she/he has found'

Since the finiteness of (15) cannot be doubted, converbs like the one in Table 3 and example (14) could be regarded as finite verb forms as well. Similar situations may arise whenever possessive and finite verbal person-number inflection is not distinguished.

Thus, nonfiniteness as a definitional criterion for converbs does not always give clear results because the finite/nonfinite distinction is a scale with various intermediate points rather than a neat binary division. Nevertheless, I would like to stick to nonfiniteness as a definitional criterion because it restricts the notion *converb* in a way that is consistent with the traditional use of the term (and equivalent terms).

2.3. Adverbial

The definitional criterion “adverbial (subordination)” is primarily intended to exclude masdars/verbal nouns (nonfinite verb forms specialized for argument subordination, or complementation) and participles (nonfinite verb forms specialized for adnominal subordination). Converb constructions are generally not arguments but modifiers, and they generally modify verbs, clauses or sentences, but not nouns or noun phrases.

The positive formulation “adverbial” is preferred here to the negative formulation “nonargumental, nonadnominal” (cf. V. Nedjalkov, this volume) not only because it is less cumbersome, but also because it can be understood as more restrictive.

There is a type of subordinate construction that is neither argumental nor adnominal, nor is it clearly adverbial: the so called *clause-chaining* construction, which is used to convey a sequence of successive events, e.g. (16) from Kumyk (Turkic).

- (16) Kumyk (Džanmavov 1967: 234)
- | | | | | | |
|-----------------|-------------------|--------------------|------------------|--------------------|-------------------|
| <i>Bu-lar,</i> | <i>köl-nü</i> | <i>gör-üp,</i> | <i>arba-syn</i> | <i>toqtat-yp,</i> | <i>čemodan-ny</i> |
| this-PL | lake-ACC | see-CONV | cart-3.POSS | stop-CONV | suitcase-ACC |
| <i>Manaj-ğa</i> | <i>da</i> | <i>göter-t-ip,</i> | <i>köl-nü</i> | <i>jağ-a-syn-a</i> | |
| Manaj-DAT | also | take-CAUS-CONV | lake-GEN | bank-3.POSS-DAT | |
| <i>bar-yp,</i> | <i>čemodan-ny</i> | <i>aç-yp,</i> | <i>şişla-ny</i> | <i>çığar-yp</i> | |
| go-CONV | suitcase-ACC | open-CONV | bottle-ACC | take.out-CONV | |
| <i>tiz-ip,</i> | <i>suw-dan</i> | <i>toltur-ıp,</i> | <i>qajtar-yp</i> | <i>čemodan-ğa</i> | |
| put.in.row-CONV | water-ABL | fill-CONV | return-CONV | suitcase-DAT | |
| <i>sal-a.</i> | | | | | |
| put-PRES | | | | | |

‘They see the lake, stop their cart, make Manaj bring the suitcase, go to the bank of the lake, open the suitcase, take out the bottles, put them in a row, fill them with water, and put them back into the suitcase.’

According to my definition, this is not a central, typical use of the converb because it is not really adverbial. However, it is not easy to make a clear-cut distinction between temporal adverbial subordination and clause-chaining. For example, one could use English adverbial subordinate constructions at least for a sequence of three events, e.g., *After they took out the bottles, putting them in a row, they filled them with water.* So it is not absurd to think of clause-chaining constructions such as in (16) as successive adverbial subordination of a special type. See section 4.2 for more discussion of clause chaining and related problems of delimitation.

2.4. Subordination

The term *subordinate* is used here in the sense “embedded”, or “incorporated into the superordinate clause”, contrasting with *coordinate* clauses, which are not part of another, superordinate clause.³ Converb constructions can often be paraphrased by means of coordinate constructions in languages that allow coordination of clauses. Cf. the English translations of the sentences in examples (17) and (18).

- (17) Italian (Pusch 1980: 20)
Franco ha mangiato cogli amici, andando poi al cinema.
 Franco has eaten with:the friends going then to:the cinema
 ‘Franco had dinner with friends and then went to the movies.’
- (18) Udmurt (Perevoščikov 1959: 240)
Nati mylys'-kydys' serekja-sa žygyrt-i-ž eš-se.
 Nati heartily laugh-CONV embrace-PAST-3SG friend-3SG:ACC
 ‘Nati laughed heartily and embraced her friend.’

One might therefore suspect that converbal constructions are also syntactically coordinate in some sense. However, converbal constructions consistently turn out to be subordinate by the most reliable criteria for subordination. See section 3.4 for more discussion.

3. Some morphosyntactic and semantic properties of converbs

3.1. The formal make-up of converbs

A converb is usually marked by an affix that is attached to the verb stem. Since languages show a general preference for suffixes over prefixes and since converbs are apparently particularly common in verb-final languages where this suffixing preference is much stronger (Greenberg 1957; Bybee–Pagliuca–Perkins 1990), it is not surprising that converbal affixes are most commonly suffixes. However, other types of affixes are also represented, in particular prefixes (e.g. in Burushaski, cf. Tikkanen, this volume), and circumfixes (e.g., Chukchi *ga...-ma* in *ga-gantaw-ma* ‘running away’, Skorik 1977: 143, and cf. example [9]). A rare example of a nonaffixal converb is provided by Ge‘ez, where converbs are formed by the vowel pattern *CaCiC*, cf. Table 2 and example (13).

Besides inflectional affixes, nonaffixal particles may also be employed as converb markers (resulting in “periphrastic converbs”), e.g., French *en* in the French *gérondif* (e.g., *en chantant* ‘singing’), or Albanian *duke* (e.g., *duke pirë* ‘drinking’). Sometimes the borderline between affixes and adjacent particles may not be sharp (e.g., French *en* in *en chantant* could perhaps be regarded as a prefix).

Not uncommonly, converbs are additionally characterized by full reduplication of the converbal form, for example:

- (19) Turkish
İnsan demir-i döğ-e döğ-e demirci ol-ur.
 person iron-ACC forge-CONV forge-CONV smith become-AOR
 ‘A person becomes a blacksmith by forging.’
- (20) Huallaga Quechua (Weber 1989: 321)
Chawra miku-n asi-rku-r asi-rku-r.
 then eat-3 laugh-ASP-CONV laugh-ASP-CONV
 ‘Then they eat, laughing (and laughing).’
- (21) Lezgian (Haspelmath 1993: 380)
Küced-aj zwer-iž=zwer-iž sala-ž Cükwer ata-na.
 street-INEL run-CONV=run-CONV garden-DAT Cükwer come-AOR
 ‘Cükwer came running into the garden from the street.’

3.2. Subject reference

The converb subject is often coreferential with the subject (or another constituent) of the superordinate clause, so that it can be left *implicit*.⁴ This frequent constellation is often exploited by grammaticalizing it, the result being converbs

whose subject must obligatorily be left implicit. On this parameter, we can in principle distinguish three types of converbs:

- i. *implicit-subject converbs* whose subject may not be expressed explicitly;
- ii. *explicit-subject converbs* whose subject is expressed explicitly (perhaps in a different case form from the subject of independent finite clauses);
- iii. *free-subject converbs* whose subject may but need not be expressed explicitly.

Examples for these three types come from Russian, Lithuanian, and Lezgian.

- (22) Implicit-subject converb: Russian
**Ona prigotoviv zavrak, Zamira razbudila detej.*
 she prepare:PFV.CONV breakfast Zamira woke.up children
 'Having prepared breakfast, Zamira woke up the children.'
- (23) Explicit-subject converb: Lithuanian (V. Nedjalkov, this volume: example [29 b])
Rut-ai išėj-us iš mišk-o, patekėjo saulė.
 Ruta-DAT go.out-CONV from forest-GEN rose sun
 'When Ruta went out of the forest, the sun rose.'
- (24) Free-subject converb: Lezgian (Haspelmath, this volume)
(Čeb) mašbur Samarkanddi-ž aqaq'-daldi
 [selves well-known Samarkand-DAT reach-POSTR.CONV]
aburu-ž req'-e gzař zať-ar ake-na.
 they-DAT way-INNESS many thing-PL see-AOR
 'Before they reached well-known Samarkand, they saw a lot of things on the way.'

This typology is not independent of the typology that divides converbs into *same-subject converbs*, *different-subject converbs*, and *varying-subject converbs* (V. Nedjalkov, this volume: section 11; varying-subject converbs are converbs whose subject may be either identical to the main clause subject or different from it). The connections between these two parameters can be represented as in Table 4. See the paper by V. Nedjalkov in this volume for some discussion.

Table 4. Subject reference in converbs

	same-subject	different-subject	varying-subject
implicit-subject converb	<i>typical</i>	unusual	unusual
explicit-subject converb	unusual	<i>typical</i>	unusual
free-subject converb	unusual	unusual	<i>typical</i>

The functional motivation for these connections should be apparent: when the subject is necessarily implicit, only same-subject reference ensures that its reference can be identified. When the subject is necessarily different from superordinate clause constituents, only explicit expression ensures that its reference can be identified. It should be noted, however, that so far the claims embodied in Table 4 lack a firm empirical foundation and are mainly based on impressionistic observations. Thus Table 4 represents a hypothesis that needs to be tested on cross-linguistic data.

3.3. Clause or phrase

In the traditional grammar of the classical languages, the presence of a finite verb was regarded as a prerequisite for sentence (or clause) status. Constituents consisting of nonfinite verbs (especially infinitives and participles) and their dependents were not regarded as clauses but as “constructions”, “phrases”, or “turns” (Russian *oborot*). Thus, many (especially more traditionally oriented) linguists do not speak of converbal clauses, but of converbal “constructions”, “syntagms” or “phrases”, e.g., Švedova–Lopatin (1989: § 565) for Russian (*deepričastnyj oborot*), Halmøy (1982) for French (*syntagme gérondif*), Pusch (1980) for Italian (*gerundio-Konstruktion*), Reese (1991) for Spanish (*Gerundialkonstruktion*).

This usage is apparently mainly motivated by the impossibility of an explicit subject in nonfinite constructions/clauses in the classical languages. Translated into modern terms, one could say that implicit-subject constructions are VPs, whereas complete finite clauses are Ss (consisting of an explicit subject NP plus a VP).

However, in many languages nonfinite constructions may include an explicit subject, and there are probably languages for which a bipartite sentence structure (i.e., $S \rightarrow NP VP$) is not correct. Thus, the traditional syntactic distinction between clauses and phrases based on finiteness and an explicit subject has no universal significance.⁵

For the purposes of syntactic typology, it seems best to adopt a definition of the clause that only specifies that the clause must contain a predicate.⁶ This means that a converb and its dependents always constitute a (converbal) clause (except perhaps when the converb is used in a grammaticalized construction, cf. section 6). A distinction such as that made by V. Nedjalkov (this volume: sections 3.1 and 3.3) between “converbs proper” (occurring in converbal phrases) and “conjunctive converbs” (occurring in converbal clauses) is rather dubious. See Bergelson–Kibrik (this volume) for more discussion of this issue.

3.4. Criteria for subordination

The notion of subordination was rather unproblematic in traditional Western grammar—every clause marked by a subordinating conjunction or another subordinator (e.g., relative pronoun) was identified as subordinate. However, this definition only works for languages that have subordinating conjunctions and relative pronouns. For a typological study, other criteria have to be sought.

In this paper, I propose the following criteria as sufficient conditions for subordination:⁷

- a. clause-internal word order
- b. variable position
- c. possibility of backwards pronominal anaphora (i.e., pronominal cataphora) and control
- d. semantic restrictiveness, and hence focusability
- e. possibility of extraction.

It turns out that converbs are consistently subordinate (rather than coordinate) by these criteria. Not all converbs fulfill all of these criteria, because there may be additional restricting factors (e.g., strict word order rules in the case of criterion [b]). However, all converbs fulfill a subset of the criteria, and nonsubordinate clauses fulfill none of them.

3.4.1. Clause-internal word order

While each of two coordinate clauses must be continuous and nonoverlapping, a subordinate clause may appear inside its superordinate clause, which becomes discontinuous. Consider example (25).

- (25) Japanese (Kuno 1973: 205)
John wa boosi o nui-de, Mary ni aisatu si-ta.
 John TOP hat ACC take.off-CONV Mary DAT greet SO-PAST
 'John took off his hat and greeted Mary.'

There is no obvious discontinuity in (25), so word order tells us nothing about the coordinate or subordinate status of the converbal clause. However, a possible alternative order is shown in (26).

- (26) *John wa Mary ni boosi o nui-de aisatu si-ta.*
 John TOP Mary DAT hat ACC take.off.CONV greet do-PAST
 'John took off his hat and greeted Mary.'

Here the clause *boosi o nui-de* comes between two constituents of the clause *John wa Mary ni aisatu si-ta*, so its subordinate status is beyond doubt.

The evidence of (26) makes it likely that in (25) the superordinate clause is also discontinuous: As in (26), *John wa* probably belongs to the superordinate clause which is broken up by the converbal clause *boosi o nuide*, whose implicit subject is controlled by *John*.

In languages with ergative case marking, the evidence of structures like (26) is often not needed to show that structures like (25) involve subordination because the subject case marking unambiguously demonstrates the discontinuity. For example, while (27 a) is ambiguous with respect to the subordinate/coordinate status like (25), (27 b) clearly has a subordinate converbal clause.

(27) Lezgian (Nakho-Daghestanian, Haspelmath 1993 a: 378, 376)

- a. *Am qudğun-na qarağ-na.*
 he:ABS jump-CONV get.up-AOR
 'She jumped up.' (lit. '... having jumped, got up.')
- b. *Načal'nikdi sehnedi-ž egeč'-na ča-ž wirida-ž*
 director(ERG) stage-DAT go.out-CONV we-DAT all-DAT
čuxsağul laba-na.
 thanks(ABS) say-AOR
 'The director came onto the stage and thanked all of us.'

In (27 a), both verbs are intransitive and the absolutive subject *am* could belong to either verb. However, in (27 b) the two verbs differ in transitivity and it is clear that the ergative subject *načal'nikdi* must belong to the second verb. Thus, the superordinate clause in (27 b) is discontinuous, showing that the clause-internal converbal construction *sehnediž egeč'na* is subordinate.

3.4.2. Variable position

Another positional criterion for subordination is variable position: only subordinate clauses may come after or before the superordinate verb. For example, in Russian the converbal clause *vernuvšis' domoj* 'having returned home' may occupy either of the positions in (28 a–b).

- (28) Russian
- a. *Vernuvšis' domoj, Xevgun načal novuju žizn'.*
 return:PFV.CONV home Khevgun began new life
 'Having returned home, Khevgun began a new life.'
- b. *Xevgun načal novuju žizn', vernuvšis' domoj.*
 Khevgun began new life return:PFV.CONV home
 'Khevgun began a new life (after) returning home.'

Of course, coordinate clauses may also occur in different orders, but the crucial difference is that the meaning changes dramatically if the events are understood

as sequential rather than simultaneous. For example, *Caesar came and saw* has a different meaning from *Caesar saw and came*. Because they are hierarchically equal, coordinate clauses show tense iconicity, i.e., the event reported in an earlier coordinate clause is interpreted as occurring earlier (Haiman 1985: 216). Meaning differences in converbs that are associated with different positions are also attested (e.g., Kortmann 1991), but they do not involve tense iconicity.

3.4.3. *Backwards pronominal anaphora and control*

That backwards pronominal anaphora is only possible in subordinate clauses is illustrated in (29). The crucial point is, of course, that the pronoun must be c-commanded by its antecedent (or here, “postcedent”), which is the case only in subordinate constructions.

- (29) a. *After she_i came home, Zamira_i solved the problems.*
 b. **She_i came home and Zamira_i solved all the problems.*

That converbal clauses are subordinate is shown by examples like (30 a).

- (30) a. *Talking to him_i, she solved all of Pedro's_i problems.*
 b. **She talked to him_i and she solved all of Pedro's_i problems.*

Another relation that depends on c-command and is therefore possible only with preceding subordinate clauses is the referential control of the implicit converb subject. Consider example (31).

- (31) Udmurt (Perevoščikov 1959: 199)
Predsdatel' šumpoty-sa vu-i-ž “Džardon-e”.
 chairman rejoice-CONV arrive-PAST-3SG Džardon-ILLAT
 ‘The chairman arrived at the “Džardon”, rejoicing.’

If we were restricted to data like (31), two analyses would be possible:

- (31') a. *[predsdatel'; šumpoty-sa] [Φ; vuiz Džardone]*
 Lit. ‘(While) the chairman (was) rejoicing, (he) arrived at the Džardon.’
 b. *[predsdatel'; [Φ; šumpoty-sa] vuiz-Džardone]*
 Lit. ‘The chairman, (while he was) rejoicing, arrived at the Džardon.’

The subject *predsdatel'* is expressed overtly only once, and the word order in (31) is ambiguous as to whether the subject belongs to the converb *šumpoty-sa* and controls the implicit subject of *vuiz* (cf. 31' a), or whether it belongs to *vuiz* and controls the implicit subject of *šumpoty-sa* (cf. 31' b). If the former turned out to be the case, we would probably not be dealing with subordination here. However, possible alternative orders as in (32) dispel any doubts that (31' b) is indeed the correct analysis:

- (32) Udmurt (Perevoščikov 1959: 205)
Tulys šundy-ly šumpoty-sa, bydes ludhyl serekja.
 spring sun-DAT rejoice-CONV whole field laugh(PRES.3SG)
 'Rejoicing over the spring sun, the whole field is laughing.'

The word order in (32) shows that we are dealing with backwards control of the implicit-subject clause, and backwards control is possible only in subordinate clauses.

3.4.4. Restrictiveness and focusability

Only subordinate clauses, but not coordinate clauses, may be interpreted restrictively (cf. Tikkanen 1987 b; this volume), i. e., as modifying the main clause in such a way that its reference is narrowed. Since restrictiveness is a prerequisite for focusing, only subordinate clauses may be focused. Various types of focusing occur with converbs and show that they are indeed subordinate.

Converbal clauses may be focused by focus particles like *also* and *only*, for example:

- (33) Catalan
Només sortint-nos de la sintaxi entesa estrictament podrem
 only leaving from the syntax understood strictly we:can
relacionar las frases de (6) amb la negació.
 relate the sentences of (6) with the negation
 'Only by leaving syntax in the strict sense can we relate the sentences in (6) to negation.'
- (34) Kumyk (Džanmavov 1967: 43)
Hatta ħq-ğanly da gör-me-gen-men.
 even go.OUT-CONV also see-NEG-PAST-1SG
 'I didn't even see after he went out.'
- (35) Udmurt (Perevoščikov 1959: 113)
Džok sōry pukśy-sa no Boris ō-ž śiskey.
 table at sit-CONV also Boris NEG-PAST.3SG eat
 'Even after sitting down at the table, Boris did not eat.'

Converbal clauses may be the focus of a polar question, for example:

- (36) Kumyk (Džanmavov 1967: 42)
O-nu gör-üp-mü, sen beri bağ-yp gel-ege-ning?
 he-ACC see-CONV-Q you there look-CONV go-FUT-2SG
 'Are you going in that direction after seeing him?'
 (i. e., 'Is it after seeing him that you are going in that direction?')

Converbal clauses may be the focus of focusing negation, for example:

- (37) Hindi-Urdu (Kachru 1981: 38)
Is tarah pāāv jamaa-kar nahīṭ, halke se calo.
 this way feet plant-CONV not light ADV walk(IMPV)
 'Walk lightly, not so firmly.' (lit. '... not planting your feet in this way.')

And converbal clauses may be the focus of cleft constructions, for example:

- (38) French (Halmøy 1982: 152)
C' est en forgeant qu' on devient forgeron.
 it is CONV forge:CONV that one becomes smith
 'It is by forging that one becomes a smith.'

Some languages have a special preverbal focus position that may be filled by a converb, for example in (39 a) from Hungarian.

- (39) Hungarian (Haiman 1985: 208)
- a. *Megbökeken-ve áll-t-am meg.*
 be.amazed-CONV stop-PAST-1SG PREV
 'It was in amazement that I stopped.'
 - b. **Áll-t-am meg.*
 stop-PAST-1SG PREV
 'I stopped.'
 - c. *Meg-áll-t-am.*
 PREV-stop-PAST-1SG
 'I stopped.'

That the converbal clause is indeed in the focus position rather than in an initial topic position is clear from the fact that the preverb *meg* follows it in (39 a). When nothing else occupies the focus position, the preverb must be in that position (cf. 39 c), otherwise the sentence becomes ungrammatical (cf. 39 b).

3.4.5. Possibility of extraction

As was observed by Ross (1967), coordinate structures severely restrict the possibility of extraction (this is his "Coordinate Structure Constraint"):

- (40) a. *Alexis sold his car and bought a bicycle.*
 b. **What did Alexis sell his car and buy?*

Subordinate clauses do not affect the possibility of extraction out of the superordinate clause:

- (41) a. *After he sold his car, Alexis bought a bicycle.*
 b. *What did Alexis buy after he sold his car?*

Converbs behave like subordinate clauses in this respect:

- (42) a. *What did Alexis buy, having sold his car?*
 b. *What, having sold his car, did Alexis buy?*

3.5. Diachronic origins of converbs

Converbs seem to arise from two main types of sources: (a) adpositional or case forms of masdars/verbal nouns which have become independent from their original paradigm; and (b) (co-predicative) participles (cf. section 4.1) which lost their capability for agreement. The first type is much more common, but the second type is well known from some European languages. Occasionally converbs appear to be very old, e.g., the past converb in Kannada or Telugu, or the Japanese converb in *-i/Ø*.

The diachronic origins of converbs merit a special investigation, so this matter is not pursued any further here.

4. Converbal and related constructions

This section discusses several construction types that exhibit particularly interesting parallels to converbal constructions. Sometimes it is not easy to say whether we are dealing with a converb or a construction of one of these related types. Such problems of delimitation will be discussed here as well. The construction types are copredicative participles (4.1), medial verbs (4.2), absolute constructions (4.3), and infinitival constructions (4.4).

4.1. Copredicative participles

In older Indo-European languages, and in particular in Latin and Classical Greek, participles are used much like many other languages use converbs. Examples (43) and (44) are illustrative of this use, called *participium conjunctum* in traditional grammar.

- (43) Hellenistic Greek (Luke 7: 19)
Kaĩ proskale-sá-men-os dúo tin-às tòn mathēt-ōn
 and call-AOR-PTCP-SG.M two some-ACC.PL ART disciple-GEN.PL
autoū ho Iōánnēs é-pemp-s-en pròs tòn kúrio-n
 his ART John PAST-send-AOR-3SG to ART Lord-ACC

lég-ōn: *sū eĩ ho erkebó-men-os, ē állo-n*
 say-PTCP:SG.M thou art ART come-PTCP-SG.M or other-ACC
pros dok-ō-men?
 wait-SUBJV-1PL

‘And John, calling unto him two of his disciples, sent them to the Lord, saying, Art thou he that should come? or look we for another?’

(44) Latin (Mark 15: 24)

(Milit-es) divis-erunt vestiment-a ejus,
 soldier[M]-NOM.PL divide:PERF-3PL garment-PL his
mitte-nt-es sort-em super e-is, qui quid
 cast-PTCP-NOM.PL.M lot-ACC upon they-ABL who what
toll-ere-t.

take-IMPERF.SUBJ-3SG

‘(The soldiers) parted his garments, casting lots upon them, what every man should take.’

Participles are verbal adjectives.⁸ As such, they share many of the morphosyntactic properties of adjectives, in particular the ability to be used attributively, functioning as relative clause heads. Thus, in Ancient Greek one can say *ho Ioánnēs ho proskalesámenos* ‘John, who called’, and in Latin one can say *militēs mittentes sortem* ‘soldiers who cast lots’. And like adjectives, Greek and Latin participles show agreement with their head noun in gender, number, and case. This agreement also appears when participles are not used in their basic adjectival/relativizing function, but in a converb-like function as in examples (43) and (44).

Since the basic function of participles is the adjectival function, the converb-like use of participles is reminiscent of the nonattributive, *copredicative* use of adjective phrases as in (45).

- (45) a. *Zhangsan came home drunk.*
 b. *Shanti drinks the milk warm.*

Following Williams (1980), this use of adjectives is sometimes simply (and misleadingly) called *predication*. A more appropriate term is *secondary predication* (e.g., Nichols 1978) or *copredication* (cf. Plank 1985, Müller-Bardey 1990).⁹

Copredicative adjective phrases (and noun phrases) share several features with converbal constructions:

- i. Their notional subject is not expressed explicitly but depends for its reference on an outside controller (this is a frequent but nonuniversal property of converbs);

- ii. syntactically they depend on the predicate rather than on the controller of their implicit subject;
- iii. the precise semantic relation between the copredicate and the main predicate can be determined only from the context (again, this is a feature only of a subset of converbs—contextual converbs);
- iv. they are most often controlled by the subject of the (superordinate) clause, although nonsubject control is also a possibility.

Given these similarities, it is understandable that verbal adjectives, when used copredicatively, function much like converbs. However, this option does not seem to be frequent in the world's languages. Of the languages that have participles, few make such extensive use of the copredicative strategy as Greek and Latin. Outside of Europe, a similar strategy can perhaps be found in several Australian languages, e.g., Jiwarli of Western Australia.¹⁰

- (46) Jiwarli (Givón 1990: 885, data from Peter Austin)
Manthara-lu kurrpirli-nha pinya-nyja yanga-rnu-ru.
 man-ERG kangaroo-ACC spear-PAST chase-PTCP-ERG
 'The man speared the kangaroo while chasing it.'

Copredicative participles are still widespread in modern European languages which descend from or were heavily influenced by Latin, for example:

- (47) a. French
Méprisé par sa famille et ses amis, Mahmoud tenta de se suicider.
 despised by his family and his friends Mahmoud tried to self
suicider.
 suicide
 'Despised by his family and friends, Mahmoud attempted to commit suicide.'
- b. German
Zu Hause angekommen, gab Wangari die mitgebrachten Geschenke ihren Kindern.
 Arriving at home, Wangari gave her children the gifts she had brought along.'

In some European languages, converbs have diachronically arisen from participles that lost their gender, number, and case agreement, e.g., in Modern Greek and in several Slavic languages (Bulgarian, Russian, Polish). The German copredicative participle illustrated in (47b) could also be regarded as a converb because there is no agreement that would prove its participial status (in general, (co-)predicative adjectives lack agreement in German).

The case of the English *-ing* form is even more indeterminate because English adjectives and participles never show agreement. Should the *-ing* form in sentences like the translations of (43), (44) and (47 b) be regarded as a copredicative participle or as a converb? Following V. Nedjalkov (this volume: section 8), we can perhaps use the criterion of frequency: Since the *-ing* form is more often used in adverbial function than in attributive function, its primary function is that of a converb.

4.2. Medial verbs and clause-chaining

The relatively recent notion *medial verb* is in many ways similar to the notion *converb*.¹¹ Indeed, it appears that both notions show some overlap that could add to the already existing terminological confusion. This section examines the relation between medial verbs and converbs in some detail and proposes a definition of both of them that captures their common features but also highlights their differences.

4.2.1. *Medial verbs*

Medial verbs are verb forms which cannot be used in isolated independent sentences but have to be used together with another verb (the controlling verb) on which they depend in that they share (at least) the mood and tense of the controlling verb, and in that the reference of their subject is often determined by the controlling verb. The notion of medial verb has especially been used in Papuan languages, whose basic word order is almost universally verb-final, so that the controlling verb is the final verb and the medial verb comes between its own dependents and the controlling verb (in sentence-medial position—hence the term). An example of a medial verb from Tauya is given in (48).

- (48) Tauya (Trans-New-Guinea; MacDonald 1990: 219)
Peima fitau-fe-e-te wate tepau-a-ʔa.
 carefully throw-PFV-1/2SG-MED.DS NEG break-3SG-INDIC
 ‘I threw it carefully and it didn’t break’.

The medial verb *fitaufeete* is less finite than the final verb (the controlling verb) *tepaʔa* in that it is not marked for mood, and tense is neutralized in it. The shape of the medial verb suffix indicates that the medial verb subject is different from the final verb subject. When the two subjects are coreferential, the same-subject medial verb suffix *-pa* is used, as shown in (49). The same-subject medial verb does not contain subject person/number markers, evidently for reasons of economy.

- (49) Tauya (MacDonald 1990: 224)
Wate ya-pi-ʔai yate-pa ni-e-ʔa.
 house I-GEN-ADESS go-MED.SS eat-1/2SG.INDIC
 'I went (to my) home and ate.'

Sequences of medial verbs and a final verb generally express sequential or simultaneous events without further specification of the nature of the semantic link between the two events. The nearest equivalent in European languages is generally coordination by means of 'and', as in the glosses of examples (48) and (49).

4.2.2. *Clause chaining*

Medial verbs can generally be combined into longer sequences in which each medial verb depends on the verb that follows it immediately and which contain only one fully finite final verb. An example containing eight medial verbs and one final verb is given in (50). According to MacDonald (1990: 218), this example is not at all unusual: "Natural speech is characterized by long series of clauses which include medial verbs, terminated by a clause with a final verb."

- (50) Tauya (MacDonald 1990: 218)
Nono imai-te-pa mai mene-a-te pai
 child (3SG)carry-get-MED.SS come.up stay-3SG-MED.DS pig
aʔate-pa nono wi nen-fe-pa yene wawi wi
 hit-MED.SS child show 3PL-TR-MED.SS sacred flute show
nen-fe-pa mene-pa pai aʔate-ti tefe-pa
 3PL-TR-MED.SS stay-MED.SS pig hit-CONJ put-MED.SS
ʔeʔeri-pa toto-i-ʔa.
 dance-MED.SS cut-3PL-IND
 'She carried the child and came up and stayed; and they killed the pigs and showed them to the children, and they showed them the sacred flutes and stayed, and they killed the pigs and put them, and they danced and cut [the pigs].'

Such examples underline the great typological divergence between languages with medial verbs and the more familiar European languages. Structures of this type have recently come to be characterized as *clause chaining*, and languages where they are prominent are *clause-chaining languages* (e.g., Longacre 1985: 263–283).¹² A sequence containing one fully finite verb and any number of medial verbs is called a *chain*, and the term *medial* can be understood as an abbreviation of *chain-medial* (cf. Givón 1990: 865). In addition to medial verbs, many linguists also talk about *medial clauses* (e.g., Longacre 1985; Roberts 1988; Payne 1991).

When one looks for analogous phenomena outside of New Guinea, structures in African languages such as those exemplified in (51) come to mind.

(51) Swahili (John 20: 1–2)

- a. *Hata siku ya kwanza ya juma Mariamu Magdalene a-li-kwenda*
 until day of first of week Mary Magdalene 3SG-PAST-go
kaburi-ni alfajiri, kungali giza bado
 grave-LOC before.dawn ? darkness still
- b. *a-ka-li-ona lile jiwe li-me-ondole-wa kaburi-ni.*
 3SG-SEQ-G9.OBJ-see DEM stone G9-PERF-remove-PASS grave-LOC
- c. *Basi a-ka-enda mbio,*
 PT 3SG-SEQ-go running
- d. *a-ka-fika kwa Simoni Petro na kwa yule mwanafunzi*
 3SG-SEQ-arrive to Simon Peter and to DEM disciple
mwingine ambaye Yesu a-li-m-penda,
 other REL Jesus 3SG-PAST-3SG.OBJ-love
- e. *a-ka-wa-ambia: ...*
 3SG-SEQ-3PL.OBJ-tell
 '[a] The first day of the week cometh Mary Magdalena early, when
 it was yet dark, unto the sepulchre, [b] and seeth the stone taken
 away from the sepulchre. [c] Then she runneth, [d] and cometh to
 Simon Peter, and to the other disciple, whom Jesus loved, [e] and
 saith unto them: ...'

The Swahili *-ka* form is similar to a typical Papuan medial verb in that

- i. it cannot be used in an isolated sentence but must occur together with a controller verb;
- ii. it does not express (absolute) tense and mood, having the same tense and mood interpretation as the controlling verb;
- iii. chains consisting of an initial fully finite verb and following *-ka* forms can be quite long, much longer than a normal sentence of a European language.

These similarities seem to justify generalizing the notion of clause chaining to structures like (51), which are not uncommon in African languages. The Swahili *-ka* form would then also be a (chain-)medial verb. This generalization was made in Givón (1990: 880 ff.); Bickel (1991); and Payne (1991).¹³ There are, then, two main types of clause chaining:

- a. Clause chaining where the final clause contains an independent verb and all preceding verbs are medial verbs. Following Stassen (1985), we can call this *anterior clause chaining*.
- b. Clause chaining where the initial clause contains an independent verb and all following verbs are medial verbs. This is *posterior clause chaining*.

As was noted in Stassen (1985: 101) and Givón (1990: 891), anterior chaining is typologically associated with OV basic order, and posterior chaining is associated with VO order.

4.2.3. *Medial verbs and converbs*

It is clear that converbs are like medial verbs in several ways. Much like medial verbs, converbs

- i. cannot be used in independent sentences;
- ii. generally do not express mood and (absolute) tense, depending on the superordinate verb for mood and tense interpretation;
- iii. often depend on their superordinate verb for the reference of their subject.

Indeed, we find converbs that are used in a way quite analogous to medial verbs in long chaining-like sequences of clauses, cf. the Turkmenian example (2b) in V. Nedjalkov (this volume), and the Kumyk example (16) above in section 2.2. Such sequences seem to show that converbs also occur in clause-chaining constructions.¹⁴

So are converbs and medial verbs perhaps the same thing – the main difference being that they are called *medial verbs* when they occur in New Guinea, and *converbs* when they occur in northern Eurasia and South Asia? To some extent, this is probably true. The linguistic traditions that have talked about “adverbial participles” and “gerunds” in Europe are quite different from those that have talked about “converbs”, “gerunds”, *deepričastija* in Altaic languages, again different from those that have studied “conjunctive participles” in South Asian languages, and again different from that have investigated “medial verbs” in Papuan languages. It usually takes some time before linguists working in different areas of the world realize that they are dealing with the same phenomenon.

Nevertheless, there are some crucial differences in the data that seem to justify two different terms, *converb* and *medial verb*, for two related but distinguishable notions. The key difference lies in the fact that prototypical converbal clauses are *subordinate* (in the sense of ‘embedded’), while prototypical medial clauses in clause-chaining constructions are not subordinate, but *cosubordinate* (in the sense of Foley–Van Valin 1984: chapter 6).

4.2.4. *Medial verbs are cosubordinate*

The criteria for the subordinate status of converbal clauses have been discussed above in subsection 3.4. Typical medial clauses fail all of these criteria. Since these criteria are not the sort of phenomena that can be easily read off from the surface form of a sentence, the demonstration of the nonsubordinate status

of medial clauses is not straightforward. However, several linguists working on clause-chaining languages have observed that despite the “dependent” nature of the medial verb (in that it does not occur independently and lacks its own tense, mood and often person/number inflection), medial clauses are not subordinate (e.g., Haiman 1980, 1985; Reesink 1983; Roberts 1988). The most detailed argumentation against the subordinate status of medial clauses can be found in Roberts (1988) for the Papuan language Amele. For three of the above criteria of subordination (section 3.4.), Roberts shows that Amele medial verbs do not fulfill them. A typical Amele (different-subject) clause-chaining construction is shown in (52).

- (52) Amele (Roberts 1988: 52)
Ho busale-ce-b dana age qo-i-ga.
 pig run.out-MED.DS-3SG man they hit-3PL-HOD
 ‘The pig ran out and the men killed it.’

First criterion (cf. section 3.4.1): in contrast to subordinate adverbial clauses (cf. 53 a), medial clauses cannot appear in clause-internal position, i.e., in between immediate constituents of the main clause.

- (53) Amele (Roberts 1988: 54, 55)
 a. Subordinate adverbial clause
Dana age ho qo-qag-an nu ho-i-ga.
 man they [pig kill-3PL-FUT PURP] come-3PL-HOD
 ‘The men came to kill the pig.’
 b. Medial clause
**Dana age ho busale-ce-b qo-i-ga.*
 man they pig run.out-MED.DS-3SG kill-3PL-HOD
 ‘The men, the pig having run out, killed it.’

Second criterion (cf. section 3.4.2): in contrast to subordinate adverbial clauses (cf. 54 a), medial clauses cannot be extraposed into clause-final position after the controlling verb.

- (54) Amele (Roberts 1988: 55, 56)
 a. Subordinate adverbial clause
Uqa sab man-igi-an ija ja hud-ig-en fi.
 she food roast-3SG-FUT [I fire open-3SG-FUT if]
 ‘She will cook the food if I light the fire.’
 b. Medial clause
**Dana age qo-i-ga ho busale-ce-b*
 man they kill-3PL-HOD pig run.out-MED.DS-3SG
 ‘The men killed it, the pig having run out.’

Third criterion (cf. section 3.4.3): Unlike subordinate adverbial clauses, medial clauses cannot contain cataphoric pronouns. Since universally, cataphoric pronouns are possible only when c-commanded by their antecedent, this shows that medial clause constituents are not c-commanded by constituents of the independent clause and hence are not subordinate.

- (55) Amele (Roberts 1988: 56, 57)
- a. Subordinate adverbial clause
(Uqa)_i sab j-igi-an nu Fred_i ho-i-a.
 [he food eat-3SG-FUT PURP] Fred come-3SG-HOD
 'Fred came to eat food.'
 - b. Medial clause
**(Uqa)_i bi-bil-i Fred_i je-i-a.*
 he MED.SIM-sit-3SG.SS Fred eat-3SG-HOD
 'While he sat, Fred ate.'
 = *'He_i sat and Fred_i ate.'

Thus, we may conclude that Amele medial clauses are not subordinate. However, they are also not coordinate in the sense in which European languages are said to have coordinate clauses. European coordinate clauses never contain verb forms that cannot stand by themselves in an independent sentence. Perhaps the familiar dichotomy subordinate/coordinate is simply not applicable to clause-chaining language. Givón (1990: 864) states:

The type of inter-clausal grammar surveyed thus far exhibits its major contrast between subordinate and coordinate clauses. But there exists another – radically different but perhaps more common – type of inter-clausal grammatical organization in language. The general name for this type is clause chaining ...

Similarly, Scancarelli (1992: 267) distinguishes three main types of clause-combining constructions: coordination/subordination, clause chaining, verb serialization. And Longacre (1985) distinguishes between coranking and chaining languages.

But instead of radically separating coordination/subordination from clause chaining, we can emphasize the similarities between these constructions. In particular, it seems quite plausible that clause combining by medial clauses is intermediate between coordination and subordination and can thus be called *cosubordination* (Foley–Van Valin 1984: chapter 6).

Cosubordination is like subordination in that it is structurally asymmetric: there is an independent clause and a cosubordinate clause. The cosubordinate clause cannot stand alone as an independent clause and may depend on the independent clause for its tense, mood, and subject reference. Thus, both cosub-

ordinate and subordinate clauses are *dependent*. However, cosubordination is like coordination in that there is no embedding of one clause into the other clause. The cosubordinate clause is not a part of the independent clause, and hence the subordination criteria of section 3.4 are not fulfilled.

Now we can use the distinction between subordination and cosubordination to define *converb* and *medial verb*. A converb is a verb form that is used primarily in (adverbial) *subordinate* clauses, and a medial verb is a verb form that is used primarily in *cosubordinate* clauses. Given these definitions, the converb/medial verb distinction is at least as clear as the subordination/cosubordination difference.

The distinctions that I have drawn can be summarized as in Figure 1 (cf. Foley 1986 for a similar picture).

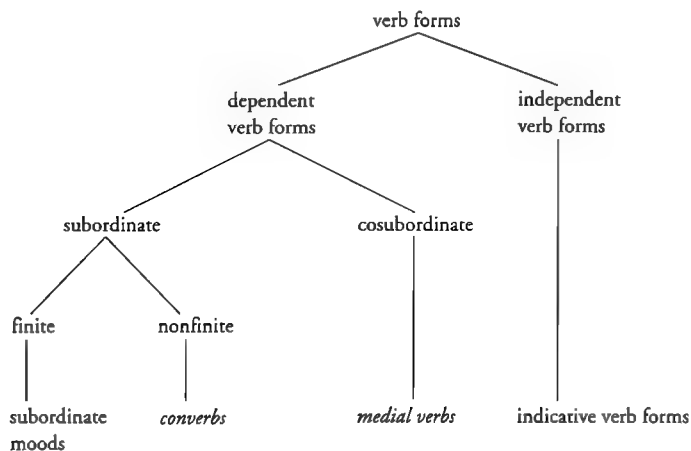


Figure 1. A classification of verb forms

Note that the proposed definitions do not imply that there is no overlap between converbs and medial verbs. Indeed, there is strong evidence that such an overlap exists. For example, as Kuno 1973 shows, Japanese clauses with the *-te* converb form are subordinate when they are same-subject, but “coordinate” (i.e., cosubordinate) when they are different-subject (see also Alpatov–Podlesskaya in this volume). And perhaps the Kumyk *-ɣp-* form is subordinate in example (36) (section 3.4.4), but cosubordinate in the chaining sentence (16) (section 2.2). Like many other grammatical distinctions, the subordinate/cosubordinate distinction is probably not always clear-cut and intermediate cases

exist. Nevertheless, it seems useful to have this distinction and to use it in delimiting converbs from medial verbs.

4.3. Absolute constructions

Especially in the older Indo-European languages we find a construction consisting of an NP plus an agreeing participle in some oblique case, e.g., the dative in older Slavic, or the ablative in Latin. This construction functions as a subordinate clause with some nonspecific adverbial relation to the main clause, for example:

- (56) Old Russian (Novgorodskaja pervaja letopis', 48)
Zautra že, solnčj-u vŭsxoďjaščj-u, vŭnid-oša vŭ svjatuju
 morning PT sun-DAT go.up-DAT enter-AOR:3PL into holy
Sofiju.
 Sophia
 'And in the morning, while the sun was rising, they went into St. Sophia.'
- (57) Latin (Luke 24: 41)
Adbuc autem ill-is non crede-nt-ibus,
 still PT they-DAT.PL not believe-PRES.PTCP-DAT.PL
dix-it: ...
 say:PERF-3SG
 'And while they yet believed not, he said: ...'

This construction is generally called absolute construction (cf. Holland 1986; König-van der Auwera 1990), or more specifically *dativus absolutus*, *ablativus absolutus*, etc. Absolute constructions in older Indo-European languages are similar to copredicative participial constructions (cf. section 4.1) in that (i) they generally involve a participle, and (ii) they function as semantically indeterminate adverbial modifiers. In contrast to copredicative constructions, absolute constructions have their own subject (the NP).

Given the similarities between converbal and (participial) copredicative constructions (cf. section 4.1) and the similarities between copredicative and absolute constructions, it is not surprising that converbal constructions with an explicit subject are often called "absolute constructions", especially in European languages. For example:

- (58) Spanish (Reese 1991: 31–36)
Permitié-ndo-lo Dios, mañana comenzaremos el viaje.
 allow-CONV-it God tomorrow we:will:begin the journey
 'God permitting, we will start out on the journey.'

- (59) English (Kortmann 1991: 12)
Off they went, she remaining behind.

However, such constructions are not nearly as peculiar as the old Indo-European constructions in examples (56) and (57). Examples (58) and (59) are cases of ordinary converbs with an explicit subject, and the label “absolute construction” does not seem necessary for them.¹⁵ Converbs with an explicit subject may be somewhat unusual in European languages, but elsewhere in the world they are quite common.

4.4. Infinitival constructions

The infinitive is widely regarded as the basic and maximally unmarked form of the verb. However, in reality the verb forms called *infinitive* in most European and many other languages do have a specific form and a specific meaning (Haspelmath 1989). Infinitives are generally used (a) in complement clauses with (roughly) irrealis meaning and (b) in purpose clauses. Their form often reflects their diachronic origin as allative-marked verbal nouns (e.g., English *to*).

Infinitives are similar to converbs in several respects:

- i. They arise diachronically from adpositional or case forms of verbal nouns (cf. section 3.5);
- ii. One important function of infinitives is to mark (purposive) adverbial subordination;
- iii. The infinitival subject is generally left implicit and is controlled by an argument of the main clause.

Thus, should we say that an infinitive is a kind of converb?¹⁶ Probably not. The best-known infinitives, those of European languages, lack one crucial converb property: these infinitives are not used primarily for adverbial subordination, but their primary use is in complement clauses. Evidently, we are dealing here with a continuum of grammaticalization: erstwhile adverbial purposive forms are increasingly used in a nonadverbial complement function. The more a purposive form moves away from its original adverbial function, the less it can be regarded as a converb. There are plenty of examples of specialized purposive converbs, e.g., the Evenki purposive converbs in *-da* and *-vuna* (I. Nedjalkov, this volume: section 3.5), and the Lezgian *-wal* converb (Haspelmath, this volume: section 3.5). These might well develop into true infinitives in the future by extending their function to irrealis complements. However, then they would cease to be typical converbs.

5. Referential control of the implicit converb subject

In many languages, the subject of the converb is often not (or cannot be) expressed explicitly but is left *implicit*, cf. section 3.2. The question to be addressed in this section is how the reference of the implicit subject of a converb is determined, or in other words, how the implicit subject of a converb is (referentially) *controlled*.

5.1. Subject control

Universally, the unmarked case is for the implicit subject of a converbal construction to be referentially controlled by the subject of the superordinate clause (*subject control*). Some languages have converbs which explicitly express disjoint reference of the converb subject and the superordinate subject, but it appears that whenever such a different-subject converb exists in a language, there is also a corresponding same-subject converb. Moreover, the same-subject converb seems to be universally unmarked with respect to the different-subject converb. In (60), the different-subject converb *-pti* is marked, for example, in that it requires a pronominal suffix, which is not allowed on the same-subject converb *-r*.

(60) Huallaga Quechua (Weber 1989: 177)

- a. *Chaya-r miku-shka-a.*
arrive-CONV.SS eat-PERF-1
'When I arrived, I ate.'
- b. *Chaya-pti-n miku-shka-a.*
arrive-CONV.DS-3 eat-PERF-1
'When she arrived, I ate.'

A situation like this where a same-subject form contrasts with a different-subject form is often described as *switch reference* (e.g., Haiman–Munro 1983). Switch reference is particularly common in medial clauses of the Papuan type, but it also occurs with converbs.

In languages that do not have such contrasting same-subject and different-subject converbs, the normal situation is subject control. For example, Kortmann (1991) found that in English, implicit-subject free adjuncts (most of which are headed by *-ing* converbs) exhibit subject control in 91.5 percent of the cases in his corpus of 1,400 free adjuncts. Subject control is grammaticalized to some extent in many languages. However, nonsubject control is rarely totally impossible, cf. the examples in (61).

- (61) a. French (Halmøy 1982: 188)
En téléphonant à certaines cliniques pour demander une
 CONV phone:CONV to certain clinics for ask.for a
consultation, on me conseille de m' adresser directement au
 consultation one me advises to myself address directly to.the
chirurgien.
 surgeon
 '(When) making phone calls to certain clinics to ask for medical
 advice, I am advised to go directly to the surgeon.'
- b. Hindi (Schumacher 1977: 68)
Uskii yah rukhaaii dekh-kaar Madhukar ke man ko coṭ
 her this rejection see-CONV Madhukar GEN inside DAT blow
lag-ii.
 hit-PAST.F
 'Seeing this rejecting attitude of hers, a blow hit Madhukar's inside
 [i. e., his soul].'

Grammarians have often shown a tendency to dismiss such exceptions to subject control. In many cases, traditional prescriptive grammarians have simply declared nonsubject controlled verbal constructions non-normative, i. e., wrong. For example, they have been condemned in Russian grammar (already in Lomonosov's [1755: 467] pioneering work), in English grammar (cf. Kortmann 1991: 224), in French grammar (e. g., Grevisse 1986: § 885), in Bulgarian and Polish grammar (e. g., Váľková 1988), and in Hindi grammar (cf. Schumacher 1977: 88). Prescriptive grammarians usually give a functional explanation for their warnings against nonsubject-controlled verbs, e. g., Grevisse (1986: § 885):

Pour la clarté de la phrase, le participe en tant qu' épithète détachée et le gérondif, qui est toujours détaché du nom (ou du pronom) support, doivent se construire de telle sorte que leur rapport avec le nom (ou le pronom) ne prête à aucune équivoque. Il est souhaitable, notamment, que le participe ou le gérondif détachés, surtout en tête d'une phrase ou d'une proposition, aient comme support le sujet de cette phrase ou de cette proposition.

This concern for clarity expressed by grammar clearly results from an insufficient appreciation of the power of pragmatic inference, which usually guarantees a nonambiguous understanding of the sentence by the hearer or reader.

But prescriptivists are not alone in dismissing exceptions to subject control. Quite a few autonomous syntacticians have used control properties in arguing for the subject status of certain types of arguments. For example, Legendre (1990: 106) claims that the controller NP of a French *gérondif* (*en V-ant*) is a

subject at some level. It may be a subject at all levels, as in (62 a), or only a surface subject, as *les manifestants* in the passive example (62 b), or only an underlying subject, as *par les policiers* in the same example.

(62) French (Legendre 1990: 106, 109)

- a. *Les policiers ont dispersé les manifestants en hurlant.*
 the policemen have dispersed the demonstrators CONV
scream:CONV
 'The policemen dispersed the demonstrators while screaming [i. e., the policemen are screaming].'
- b. *Les manifestants ont été dispersés par les policiers en hurlant.*
 the demonstrators have been dispersed by the policemen
CONV scream:CONV
 'The demonstrators were dispersed by the policemen while screaming [i. e., the demonstrators or the policemen are screaming].'

In dative experiencer constructions, both the nominative stimulus NP (*cette femme* in [63 a]) and the dative experiencer NP may control the *gérondif* subject:

(63) French (Legendre 1990: 111)

- a. *Cette femme lui plaît tout en ne correspondant pas tout à fait à son idéal féminin.*
 this woman him pleases even CONV NEG correspond:CONV
NEG all at fact to his ideal feminine
 'This woman is pleasing to him while not corresponding exactly to his feminine ideal.'
- b. *Que la France lui plaise tout en n' y ayant jamais mis les pieds, toi, ça te surprend?*
 that the France him please even CONV NEG there have:CONV
ever put the feet you that you surprises
 'That France is pleasing to him without ever having set foot there, is it surprising to you?'

Control by the dative experiencer is not an exception to the rule that only a subject (at some level) may be a *gérondif* controller, because Legendre (along with much of the rest of the rest of the relational grammar literature)¹⁷ claims that dative experiencers are underlying subjects which become indirect objects only at the surface level.

But Legendre's claim is directly disconfirmed by examples like those in (64) from French texts cited by Halmøy (1982), where the *gérondif* controller is a

direct object and not a subject at any level (unless one wants to assume an ad hoc rule of subject-to-direct object demotion).

(64) French (Halmøy 1982: 188)

- a. *En téléphonant à certaines cliniques pour demander une*
 CONV phone:CONV to certain clinics for ask.for a
consultation, on me conseille de m' adresser directement au
 consultation one me advises to myself address directly to.the
chirurgien.
 surgeon
 '(When) making phone calls to certain clinics to ask for medical
 advice, I am advised to go directly to the surgeon.'
- b. *En la reconduisant jusqu' au portillon de notre*
 CONV her accompany:CONV up to:the barrier of our
hospice ce soir-là elle ne m' embrassa pas
 hostel this evening-there she NEG me kissed NEG
 'When I accompanied her back to the barrier of our hostel that
 evening, she didn't kiss me.'

Like prescriptive grammarians, autonomous syntacticians have generally failed to see the significance of pragmatic inference for the referential control of implicit subjects. While prescriptivists isolated themselves from the facts by simply declaring recalcitrant data non-normative, autonomous syntacticians achieved this by restricting themselves to a (usually small) set of constructed examples. It is thus not surprising that the crucial role of pragmatic inference has been emphasized and explored especially in corpus-based studies such as Schumacher 1977 (on Hindi), Halmøy 1982 (on French), Kortmann 1991 (on English). When faced with a large set of actually occurring examples, it becomes impossible to ignore the interesting minority of cases where the implicit subject of a converbial clause is not controlled by the superordinate subject.

5.2. Pragmatically determined nonsubject control

The generalization that seems to apply to the large majority of non-subject-controlled converbs is that the controller is a pragmatically highly salient participant with whom the hearer or reader can empathize (cf. Kuno–Kaburaki 1977 for the role of empathy in syntax). In particular, it is often a participant whose mental perspective is taken in the sentence. In contrast to syntactic rules, pragmatic rules of this kind are rather vague, and a lot of work needs to be done to make them more precise. And there is no doubt that languages differ in their pragmatic conditions for controllership. Below we consider only a few conditions which seem to be valid for many languages.

When the controller is a dative participant, it is most often an experiencer rather than a recipient, because an experiencer is generally the most salient participant in a clause, whereas a recipient, though being generally human, is upstaged by the agent of its clause. Some more examples of dative experiencer controllers (in addition to 63 b):

- (65) a. Polish
Pisząc te słowa, przypomniała mi się zeszłoroczna rozmowa.
 write:CONV these words remembered to.me self last:year's conversation
 'Writing these words, I recall last year's conversation.'
- b. Russian¹⁸
Nynče uvidev ee mel'kom, ona emu pokazalas' ešče lučše.
 now see:PFV.CONV her cursorily she to.him seemed even better
 'Now catching a glimpse of her, she seemed even more beautiful to him.' (L. Tolstoy)
- c. Hindi (Schumacher 1977: 51)
Uske mariyal cebre ko dekh-kar Amrit ko kruur aanand mil-aa.
 his sickly face DAT see-CONV Amrit DAT malicious joy meet-PAST.M
 'When seeing his sickly face, Amrit felt a malicious joy.' (lit. '... a malicious joy came to Amrit.')
- d. English (Kortmann 1991: 66)
It has seemed to me lately, watching you with a father's eye, that you have shown signs of being attracted by Algernon Fripp.

While syntactic arguments have often been put forward for an underlying subject status of dative experiencers (cf. section 5.1), such an analysis has never been advanced for accusative experiencers. Nevertheless, these too can control implicit converb subjects.

- (66) a. French (Halmøy 1982: 184)
En traversant la cour déserte, le bruit de ses pas l'impressionna.
 CONV cross:CONV the courtyard deserted the noise of his steps him impressed
 'Crossing the deserted courtyard, the noise of his steps impressed him.'

- b. English (Kortmann 1991: 58)
Sitting quietly here, the memory stirred him.
- c. Bulgarian (Válčkova 1988: 81)
... razxoždajki se iz stoličnite ulici, meždu prazničnite
 walk:CONV self from capital's streets among holiday's
ukrasi na vitrinite s uporita posledovatelnost i
 decorations of shop.windows with stubborn consistency and
nerazgadaemost ni posreštava nadpisite na tezi tabeli.
 mysteriousness us hit inscriptions on these signs
 'Walking through the capital's streets, among the holiday decorations
 in the shop windows the inscriptions on these signs hit us with
 stubborn consistency and mysteriousness.'
- d. Polish (Válčkova 1988: 81)
Słuchając zeznań świadków, orgarnia człowieka
 listen:CONV statements witnesses:GEN seizes person
przerażenie.
 horror
 'Listening to the witnesses' statements, horror seizes one.'
- e. Vedic Sanskrit (Tikkanen 1987 a: 150)
Strīy-am dṛṣ-ṭvāya kitavā-m tatāpa.
 woman-ACC see-CONV player-ACC distress:PERF
 'Upon seeing (his) woman, it distresses the player.'

Not uncommonly, the controller is not a direct participant of the superordinate clause, but a possessor of a participant. In such cases, the possessum is often a noun that expresses a mental entity of some sort, so that the situation is naturally seen from the possessor's mental perspective.

- (67) a. French (Halmøy 1982: 189)
En organisant l' enquête ..., notre but était de trouver
 CONV organize:CONV the inquiry our goal was to find
un dénominateur commun ...
 a denominator common
 'Organizing the inquiry, it was our goal to find a common denominator ...'
- b. English (Kortmann 1991: 43)
Looking out for a theme, several crossed his mind.
- c. Bulgarian (Válčkova 1988: 81)
Trāgvajki si, mislite mi se nasočixa ...
 move:CONV self thoughts my self turned
 'Starting out, my thoughts turned ...'

d. Hindi (Schumacher 1977: 31)

Māāgruu ko dekh-kar motiyaarii kaa kalejaa kāāp-ii.

Māāgruu DAT see-CONV motiyaarii GEN heart tremble-PAST.F.SG

'When the *motiyaarii* (girl choosing her husband) saw Māāgruu, her heart trembled.'

Given that the referential control of the implicit converb subject is pragmatically governed to a substantial extent, it is not mysterious that control is also possible in subjectless constructions with an implicit generic ('one') agent, for example:

(68) a. Polish (Weiss 1977: 279)

Chcąc kupić bilet, trzeba stanąć w kolejce.

want:CONV buy ticket one.must stand in line

'Wanting to buy a ticket, one has to stand in a line.'

b. Russian (Čeremisina 1977: 5)

Prigotoviv testo, nado dať emu poležat'.

prepare:PFV.CONV dough one.must give to.it lie

'Having prepared the dough, it is necessary to leave it lying for some time.'

Nor does it come as a surprise that the converb subject may be controlled by referents that are not present in the sentence at all, but either only in the preceding discourse, or in the situational context. Example (69) shows control by a salient participant in the preceding discourse,

(69) French (Halmøy 1982: 179)

Il pensa une seconde que c' était sans doute cela qui

he thought a second that it was without doubt that which

l' avait sauvé, lui, trois mois plus tôt, mais en même

him had saved him three months more early but at same

temps, il cherchait un moyen de lui prouver le contraire.

time he sought a means to to.him prove the opposite

En y réfléchissant, c' était elle qui dès le début

CONV about.it think:CONV it was her who from the beginning

de leur liaison avait pris toutes les initiatives ...

of their relationship had taken all the initiatives

'He thought for a second that that was perhaps what had saved him three months earlier, but at the same time he was looking for a means to prove the opposite to him. Thinking about it, it was she who had taken all the initiatives from the beginning of their relationship ...'

Control by a participant of the situational context is commonly found in converb constructions that modify the illocution rather than the propositional content. At the illocutionary level, the most salient participant is the speaker, so the speaker is understood as the subject of such converbs. This is illustrated by the following examples (admittedly, in both these cases we are dealing with a set expression on the way to grammaticalization, cf. section 6.1).

- (70) a. English (Kortmann 1991: 51)
Putting it mildly, the holiday resort didn't quite meet our expectations.
- b. Bulgarian (Válčková 1988: 83)
Sádejki po izdadenata prisáda, otgovorát može bi e
 judge:CONV by passed judgement answer can be is
položitel.
 positive
 'Judging by the judgment that was passed, the answer is perhaps positive.'

We have seen in the preceding discussion that the referential control of the implicit converb subject is often pragmatically determined even in languages where the superordinate subject is the controller in the overwhelming majority of occurring cases. This leads to the question whether a grammatical principle of subject control has to be assumed at all. Since control is by a highly salient participant when it is not by the subject participant, and since the subject is most often the most salient participant of a clause, the most economic statement would be simply that the implicit subject is controlled by the most salient participant. In this way we would eliminate converb control completely from the syntax and rely exclusively on pragmatics.

Against such a pragmatic reduction of converb control, it could be objected that there are cases where syntax clearly plays a role. For example, Mohanan (1983) cites the following pair of sentences.

- (71) English
- a. *Lying idly in the sun, John watched Mary.*
 (John is lying in the sun.)
- b. *Lying idly in the sun, Mary was watched by John.*
 (Mary is lying in the sun.)

Mohanan claims that these sentences show that the implicit subject of *lying* is controlled by the subject rather than the agent of the superordinate clause. Semantically, the superordinate clause is identical in (71 a) and (71 b), but syntactically they differ. A pragmatic reductionist could reply to this that (71 a) and

(71 b) differ not only syntactically, but pragmatically as well: the passive clause in (71 b) gives greater pragmatic salience to the patient participant *Mary*.

The issue of the mutual relation between syntax and pragmatics is, of course, of enormous proportions, and it cannot be resolved without extensive further studies, using all the evidence that is available. A cross-linguistic perspective can play an important role here by showing what is universal, what is widespread and what is particular to individual languages.

6. Grammaticalization of converbal constructions

Like other nonfinite verb forms, converbs are extensively made use of in grammaticalized constructions. Verbs in a converb form may themselves be grammaticalized and become grammatical markers (sections 6.1 to 6.3.), or converbs may be part of a construction where another element becomes a grammatical marker (section 6.4.).

6.1. From converb to adposition

Converbal forms of certain verbs may be grammaticalized into adpositions. In this diachronic process, the object argument of the converb becomes the complement of the adposition, while the subject argument (which is generally implicit anyway) disappears completely. The analogous process in serial verbs is better known (e.g., Givón 1975). For example, in Yoruba the verb *fì* 'put' is used in a general instrumental function, and in Mandarin Chinese the verb *gěi* 'give' is used in a general recipient function. While the morphosyntactic correlates are not immediately apparent in isolating languages and presuppose detailed syntactic analysis, the meaning of examples (72) and (73) makes it clear that the serial verb has become a kind of grammatical marker (or *co-verb*, to use the widespread term for an adposition-like serial verb).

- (72) Yoruba (Rowlands 1969: 82)

Mò fì abẹ́ gẹ́ e.

I put razor cut it

'I cut it with a razor.'

- (73) Mandarin Chinese (Bisang [this volume])

Wǒ gěi tā mǎi xiāngyān.

I give he buy cigarettes

'I buy him cigarettes.'/'I buy cigarettes for his sake/on his behalf.'

The grammaticalization of converbs with meanings such as 'giving' and 'putting' does not seem to be as common as with serial verbs. However, converbs are commonly grammaticalized into adpositions with more specific functions. König and Kortmann (1991: 120), in a study focusing on English, identify the following three semantic areas where English has adpositions deriving from *-ing* converbs:

- (74) a. time: *during, pending, ago, past*
 b. exception: *barring, excepting, excluding*
 c. topic/perspective: *concerning, considering, regarding, respecting*

The transition from converb to adposition can be illustrated with the following examples:

- (75) English (König–Kortmann 1991: 116)
 a. *Considering the conditions in the office, she thought it wise not to apply for the job.*
 b. *Considering his age, he has made excellent progress in his studies.*

In both sentences, *considering* can either be interpreted as an *-ing* converb or as a preposition. However, the former interpretation is much more likely in (75 a), where the subject *she* may control the implicit subject of *considering*, whereas the latter interpretation is more likely in (75 b), where no overt controller is available in the sentence.

Examples of converb-derived adpositions from other languages are German *entsprechend* 'according to' (from *entsprechen* 'correspond'), Russian *spustja* 'after' (from *spustit'* 'let down'), Turkish *göre* 'according to' (from *gör-* 'see'). (See also Kortmann–König 1992 for more examples from Germanic and Romance, and Haspelmath in this volume [section 5.3] for examples from Lezgian.)

6.2. From converb to subordinating conjunction

It is not uncommon for adpositions and subordinating conjunctions to share a common form (e.g., *before, after* in English). In such cases the adposition is usually the primary use of the expression which secondarily takes a clausal argument as well.

The same is true for many adpositions that originate in converbs. Just as a verb may take a noun phrase object which becomes the adposition's argument after the grammaticalization (subsection 6.1), it may take a complement clause which becomes the subordinate clause linked by the conjunction to its superordinate clause. Compare the following examples, where the (a) sentences show a converb-derived adposition, while the (b) sentences show the corresponding converb-derived conjunction or conjunctive expression. (In addition to the

converb, these conjunctive expressions often contain a general subordinator, e. g., English *that*, French *que*, etc.)

- (76) English (Quirk et al. 1985: 660)
- a. (adposition)
Considering her age, she has made excellent progress in her studies.
 - b. (conjunction)
Considering that she is rather young, she has made excellent progress in her studies.
- (77) French (Grevisse 1986: 1539, 1653; *durant* from *durer* 'last')
- a. (adposition)
Durant la campagne, les ennemis se sont tenus enfermés dans leurs places.
during the campaign the enemies self have held enclosed in their places
'During the campaign, the enemy stayed locked in their places.'
 - b. (conjunction)
Durant que j' hésitais, elle me reconnut.
during that I hesitated she me recognized
'While I was hesitating, she recognized me.'
- (78) Russian (*ne-smotrja* from [*ne*] *smotret'* [not] look')
- a. (adposition)
Nesmotrja na ego nedostatki, ja ego ljublju.
in.spite of his shortcomings I him love
'Despite his shortcomings, I love him.'
 - b. (conjunction)
Nesmotrja na to, što ona živet v Amerike, on vljubilsja v nee.
in.spite of it that she lives in America he fell.in.love with her
'Although she lives in America, he fell in love with her.'
- (79) Lezgian (Haspelmath 1993: 389; *kiligna* from *kiligin* 'look')
- a. (adposition)
Azarlwili-ŋ kiligna ɣun fe-na-č.
illness-DAT because.of I:ABS GO-AOR-NEG
'Because of the illness I didn't go.'
 - b. (conjunction)
Wiči-n wezifa-jar haqisağwile-ldi tamamar-uni-ŋ kiligna
self-GEN duty-PL conscience-SRESS fulfill-MASD-DAT looking

kawxadi-ŋ xürü-n ŋemät-di-n arada jeke hürmet
 chairman-DAT village-GEN people-GEN among big respect
awa-j.

be-PAST

'Since he fulfilled his duties conscientiously, the chairman enjoyed great respect among the villagers.'

Much like converb-derived adpositions, converb-derived conjunctions in European languages are infrequent in texts, have very special meanings and in general show a relatively low degree of grammaticalization. The lists given in grammars are quite long: Quirk et al. (1985: 998) list *assuming, considering, excepting, granting, providing, seeing, supposing, given* for English, and Grevisse (1986: § 1025) lists for French *étant donné que, cependant que, durant que, en attendant que, pendant que, suivant que, excepté que, attendu que, pourvu que, supposé que, vu que*.

In contrast to this, there is one converbal verb form that is grammaticalized in a large number of languages to a conjunction that occurs very frequently and has a very abstract function: the converb form "saying". In addition to its original use as a marker of direct speech, "saying" is commonly used to mark not only complements to verbs of utterance, but also complements to verbs of thinking and others. "Saying" does not have to be a converbal form, it may also be a serial verb (cf. Bisang, this volume). Compare Saxena (1987), Ebert (1991) for cross-linguistic studies of this phenomenon. Some examples of converbal "saying" with verbs of thinking and knowing are given in (80).

- (80) a. Udmurt (Perevoščikov 1959: 245)
Omel', aslaŋ malpam-eŋ odno ik bydesm-o-ŋ
 Omel' self's intention-3SG definitely be.realized-FUT-3SG
ŋuy-sa, tuŋ mur osk-e.
 say-CONV very deep believe-PRES.3SG
 'Omel' is deeply convinced that his intention will definitely be realized.'
- b. Mongolian (Bisang, this volume: example [139])
Aav margaš ir-ne ge-ŋ med-ne.
 father tomorrow come-IMPF say-CONV know-IMPF
 'He knows that the father will come tomorrow.'
- c. Kumyk (Džanmavov 1967: 316)
Ör Qazanyš-da qonağ-ym Adilbek-da bir as
 Upper Qazanyš-LOC friend-1SG Adilbek-LOC one ermine
de-p ešit-di-m.
 say-CONV hear-PAST-1SG
 'I heard that my friend Adilbek in Upper Qazanyš has an ermine.'

This use of the converb “saying” is also described in this volume for Burushaski (Tikkanen, example [11]), Tamil (Bisang, examples [79] and [80]), Lezgian (Haspelmath).

Other functions in which a converbal form “saying” is commonly employed are (i) as a causal conjunction (cf. example [81]), (ii) with ideophones (cf. example [82]).

- (81) a. Methei (Tibeto-Burman; Saxena 1988: 379)
Ima na aiho thabak-tu tou-de hāi-bagi šao-rammi.
 mother my I work-CL do-NEG say-CONV angry-PAST
 ‘My mother was angry because I didn’t do the work.’
- b. Kumyk (Džanmavov 1967: 314)
Sen bar de-p, öl-me gerek-biz-mi?
 you exist say-CONV die-INF necessary-1PL-Q
 ‘We have to die because you exist?’
- c. Lezgian (Haspelmath 1993: 390)
Bazardi-n juğ ada-z, tars-ar awa-č lubu-z,
 Sunday-GEN day he-DAT [lesson-PL exist-NEG say-CONV]
tak’an ša-nwa-j.
 hateful be-PERF-PAST
 ‘He hated Sunday because there were no lessons.’
- (82) a. Nepali (Saxena 1988: 376)
Saroja dhəmmə bhanera pacchaany-o.
 Saroja IDEOPH say:CONV fall.down-PAST.DISJUNCT
 ‘Saroja fell down with a thud.’ (lit. ‘... saying *dhəmmə*.’)
- b. Kumyk (Džanmavov 1967: 314)
Čyq-lar tapur-tupur de-p jer-jer-ge sebelen-di.
 drop-PL IDEOPH say-CONV place-place-DAT fall-PAST
 ‘Raindrops fell here and there with a *tapur-tupur* noise.’

6.3. From converb to applicative marker

In the previous two sections we saw cases where a converbal verb form becomes a grammatical marker that is associated with its dependent. In this way, dependent-marking constructions result. In this section we briefly look at a case where a grammaticalized converb has become associated with and attached to its head, resulting in a head-marking construction.

Chickasaw (Muskogean; Munro 1983) has a same-subject converb marked by the suffix *-t*. Its use is illustrated in (83).

- (83) Chickasaw (Muskogean; Munro 1983: 232)
- a. *Mali-t itti' apakfoota-li-tok.*
 run-CONV tree go.around-1SG.ACT-PAST
 'I went around the tree running, i. e., I ran around the tree.'
- b. *Ittola-t sa-lbak kobaffi-li-tok.*
 fall-CONV 1SG.POSS-arm break-1SG.ACT-PAST
 'I broke my arm when I fell.'

When the verb *ishi* 'get, take' is used as a converb, its meaning may be bleached so that it indicates mere instrumentality (cf. example [84 a]). This semantic grammaticalization is normally accompanied by phonological and morphological reduction, whereby the verb *ishi* (plus the *-t* converb suffix) becomes attached to the superordinate verb as a prefix *isht-* which functions as an instrumental applicative marker (cf. example [84 b]).

- (84) Chickasaw (Munro 1983: 234)
- a. *Tali' ish-li-t isso-li-tok.*
 rock take-1SG.ACT-CONV hit-1SG.ACT-PAST
 'Taking a rock, I hit him.' Or: 'I hit him with a rock.'
- b. *Tali' isht-isso-li-tok.*
 rock APPL.INSTR-hit-1SG.ACT-PAST
 'I hit him with a rock.'

Finally, the examples in (85) show that all connections to the original verb have been lost and that *isht-* is synchronically a true applicative marker. In (85 a), the instrumental NP is not adjacent to the verb, and in (85 b), the meaning is even more abstract.

- (85) Chickasaw (Munro 1983: 234)
- a. *Pāsita sa-pāshi' ish-takchi-li-tok.*
 ribbon 1SG.POSS-hair APPL.INSTR-tie-1SG.ACT-PAST
 'I tied my hair with a ribbon.'
- b. *Isht-anompoli-li.*
 APPL.INSTR-talk-1SG.ACT
 'I talked about it.'

This development is interesting because applicatives are the functional equivalent of adpositions, using different structural means (head-marking rather than dependent-marking). And we saw in subsection 6.1 that adpositions may arise from converbs as well. (Indeed, the Chickasaw case is quite parallel to Yoruba *fí* 'put [instrumentally]', which, however, is a serial verb rather than a converb.)

6.4. Converbs in periphrastic constructions

Like other nonfinite verb forms (participles, verbal nouns, infinitives), converbs are commonly used as the form of the main verb in aspectual periphrastic constructions, especially in progressives and resultatives/perfects. The auxiliary used in such constructions is a locative or existential copula (cf. Hengeveld 1992: 268–271).

Some examples of periphrastic progressives involving converbs are given in (86) to (88). The converb in a progressive periphrasis is usually a simultaneous converb.

- (86) Spanish (e. g., Reese 1991: 40–49)
Juan estaba hablando inglés.
 'Juan was speaking English.'
- (87) Limbu (Tibeto-Burman)
Pe'k-ʔe-aŋ ɸoʔl-ε.
 go-1SG.S:NPT-CONV be-1SG.S:NPT
 'I am going.'
- (88) Tamil (Bisang, this volume: example [70])
Kumaar enkal viitt-il tank-i iru-kkir-aan.
 Kumar we:OBL house-LOC stay-CONV be-PRES-3SG.M
 'Kumar is staying in our house.'

In Turkish and Lezgian, synchronic imperfective forms can be traced back to an original progressive periphrasis involving a converb.¹⁹

- (89) Turkish
yazı-yor < yaz-a yor
 write-IMPF write-CONV goes
 'is writing, writes'
- (90) Lezgian (Haspelmath, this volume)
fi-ʒwa < fi-ʒ awa
 go-IMPF go-CONV is
 'is going, goes'

According to Bybee–Dahl (1989: 77), the most common source of progressives are locative expressions paraphraseable as 'to be located in or at an activity'. While converbs do not directly express location, the converbal strategy illustrated here is similar to the locative strategy in that (i) the auxiliary verb that is used with converbs is generally the locative copula (e. g., Spanish *estar*, contrasting with the nominal copula *ser*, and Lezgian *awa*, contrasting with the nomi-

nal copula *ja*) or a verb of motion (e.g., Turkish *yör*), and (ii) the converbs themselves often go back to locative forms of verbal nouns.

When an anterior or perfective converb is used in a periphrasis, a resultative construction (cf. Nedjalkov 1988) results, which may become a perfect (Maslov 1988; Bybee–Dahl 1989: 68–73). Some examples are given in (91) to (93).

- (91) Japanese (Bisang, this volume: example [104])
Doa ga shime-te aru.
 door NOM close-CONV be:PRES
 ‘The door is closed/The door has been closed.’
- (92) Dialectal Russian (Trubinskij 1988: 389)
Syn ženi-vši.
 son marry-ANT.CONV
 ‘The son is married.’
- (93) Avar (Nakh-Daghestanian; Saidov 1967: 795)
Wač-un wuga.
 come-CONV is
 ‘He has come.’

Like progressive periphrases, resultative and perfect periphrases may be formed in various ways, but the combination of ‘be’ auxiliaries with a perfective converb is one of the main strategies (cf. Nedjalkov–Jaxontov 1988: 19; Bybee–Dahl 1989: 68).

Like the other cases of grammaticalization (sections 6.1–6.3), where the converb itself is the grammaticalized element, periphrastic constructions involving converbs lead to an increase in the frequency of converbs and eventually to the disappearance of the converb (e.g. in [89] and [90]).

Before leaving periphrastic constructions let us briefly look at one case where the periphrasis does not express an aspectual notion but an argument function. Consider examples (94) and (95).

- (94) Tamil (Bisang, this volume: example [75])
Raajaa Kumar-ukku.k katav-ai.t tira-ntu kotu-tt-aan.
 Raja Kumar-DAT door-ACC open-CONV give-PAST-3SG.M
 ‘Raja opened the door for Kumar.’
- (95) Japanese (Bisang, this volume: example [109])
Mary ga ootoo ni hon o yon-de kure-ta.
 Mary NOM brother DAT book ACC read-CONV give-PAST
 ‘Mary read the book to my brother (for me).’

Here the auxiliary verb 'give' functions as a sort of applicative marker (a "periphrastic applicative"), introducing a new benefactive argument into the clause, and this construction is thus reminiscent of the Chickasaw case described in the previous section. However, here it is not the converbal form which is grammaticalized as an applicative marker, but a superordinate verb that is combined with a converbal form functions as an applicative auxiliary.

7. Notes on terminology²⁰

As was mentioned in section 1, the two most common terms for converbs in the literature are *gerund* and *adverbial participle*. Unfortunately, both of these have so serious shortcomings that they are unsuitable for general use.

The use of the term *gerund* for "converb" is based on the gerunds in the Romance languages (Italian and Spanish *gerundio*, Rumanian *gerunziu*, Portuguese *gerúndio*, French *gérondif*). The Romance gerund is a rather typical converb, and so it might seem reasonable to extend its use to converbs elsewhere.²¹ However, the term *gerund* also has another widespread use that potentially causes confusion: the Latin gerund as well as the English gerund (in the usage of many, especially traditional, grammarians, e.g., Zandvoort 1957; Huddleston 1984) is a kind of verbal noun, not a verbal adverb like the converb. This double use of the term *gerund* is, of course, not accidental: the Romance gerund has its origin in a particular use of the Latin gerund. English is typologically different from the Romance languages in that it makes extensive use of an inflectional verbal noun resembling the Latin gerund, so the term in its Latin sense was handy for grammarians of English. On the other hand, unlike the Romance situation, the English verb form that is used as a converb is also used as a participle, so the term *present participle* was sufficient for English converb-like constructions. Since both the Romance and the English grammatical traditions have been very influential in modern linguistics, adopting the term *gerund* for general use in either its Romance or its English sense would inevitably lead to misunderstandings that can be avoided by adopting the new term *converb* (as well as a new term like *masdar* or *verbal noun* for the Latin and English gerund).

A further complication comes in through the French use of *gérondif* for *gerund* (not only for French *en*-converbs such as *en chantant*, but also for converbs in other languages, e.g., Mirambel 1961 on Greek). Morphologically, French *gérondif* corresponds more directly to *gerundive*. *Gerundive*, however, has another totally different use: like Latin *gerundivum*, it refers to a modal participle with passive orientation (cf. Haspelmath 1994).²²

The term *adverbial participle* is widespread in Slavic linguistics (in languages that do not have a special term like Russian *deepričastie*), e. g., Rappaport (1984).²³ The *adverbial* part of this rather cumbersome term makes sense—converbs are adverbial in nature. But the *participle* part is only justified historically: Slavic converbs go back diachronically to participles. Participles (i. e., verbal adjectives) and converbs (i. e., verbal adverbs) only share the property of being verb forms used in a nonprototypical syntactic function, and from a purely synchronic point of view it would be equally appropriate to call participles “adjectival converbs”. Other terms involving *participle* are *indeclinable participle* (e. g., Bobran 1974 for Polish and Russian; Macdonnell 1927 for Sanskrit) and *conjunctive participle*.²⁴ This latter term is especially widespread in works on South Asian languages, following Grierson’s (1903–1928) usage (cf. also Tikkanen, this volume). However, *participle* is even less felicitous for South Asian languages than for Slavic languages, because South Asian converbs are not diachronically connected to participles.

Another term that is sometimes used for Sanskrit and modern South Asian languages is *absolutive* (e. g., Schumacher 1977).²⁵ This term is also confusing, not so much because *absolutive* more often refers to a nominal case (contrasting with *ergative*), but especially because it suggests a connection with *absolute constructions* (cf. section 4.3.), leaving the nature of this connection open. In the term *absolute construction*, *absolute* is generally taken to mean ‘not sharing an argument with the main clause’ (cf. König–van der Auwera 1990: 338). However, Schlegel (1820), who first called the Sanskrit converb an *absolute participle*, must have had something else in mind: unlike the Latin and Greek *participium conjunctum* (and like absolute constructions), the Sanskrit converb does not show agreement with any main clause constituent and is in this sense “absolute” (at the same time, it lacks an explicit subject and is in this sense not “absolute”).

The term *converb* was coined by the Finnish Altaicist Gustaf John Ramstedt (Ramstedt 1903: 55).²⁶ It was adopted by many other Altaicists for converbs in Turkic (e. g., Krueger 1962; von Gabain 1941), in Mongolian (Hangin 1968), and in Tungusic (Benzing 1955). In a general typological sense, the term *converb* was first used in Nedjalkov–Nedjalkov 1987.²⁷

Abbreviations

ABL	ablative case	INESS	inessive
ABS	absolutive case	INSTR	instrumental
ACC	accusative case	INTR	intransitive
ACT	active	LOC	locative
ADESS	adessive case	MED	medial verb

ADV	adverbial	MASD	masdar (verbal noun)
ANT	anterior	NOM	nominative
AOR	aorist	NP	noun phrase
APPL	applicative	OBJ	object
ART	article	PAST	past tense
ASP	aspect	PERF	perfect
AUX	auxiliary verb	PFV	perfective
CAUS	causative	PL	plural
COND	conditional	POSS	possessive
CONV	converb	POSTR	posterior
DAT	dative	PRES	present
DEM	demonstrative	PREV	preverb
DS	different-subject	PT	particle
ERG	ergative	PTCP	participle
F	feminine	PURP	purposive
FUT	future	Q	question particle
G	gender (G ⁹ = ninth gender)	REL	relative marker
GEN	genitive	SEQ	sequential
HAB	habitual	SG	singular
HOD	hodiernal tense	SIM	simultaneous
IDEOPH	ideophone	SRESS	superessive case
ILLAT	illative	SS	same-subject
IMPERF	imperfect	STAT	stative
IMPF	imperfective	SUBJV	subjunctive
IMPV	imperative	TOP	topic
INCL	inclusive	TR	transitive
INDIC	indicative	VP	verb phrase
INEL	inelative case		

Notes

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1. By contrast, there are categories of individual languages that are not universally applicable, e.g., the English *ing* form, the common/neuter gender distinction in the Nordic languages, umlaut as a morphophonemic phenomenon in Germanic languages, the Russian imperative as used in asyndetic conditional clauses (*priđi ja vovremja ...* 'if I arrived on time ...'), etc.

2. The term *masdar* comes from Arabic grammar (Arabic *maṣdar* 'origin; verbal noun') and is widely used in grammatical descriptions of western Asian and northern African languages (cf. Bergelson–Kibrik [this volume] for Tuva, and Haspelmath 1993 for Lezgian). I prefer it over *verbal noun* because it consists only of a single root, like *participle* and *adjective*.
3. Haiman (1985: chapter 4) seems to understand *subordination* in a rather different way. Thus, his arguments that converbal constructions are not "subordinate" but "incorporated" are not in contradiction with what I say in this paper.
4. Instead of using the term *implicit subject*, one could also use the equivalent terms *implied subject* (e.g., Quirk et al. 1985: 1121), *empty subject*, *covert subject*, *understood subject*, *unexpressed subject*, *silent subject*, or even the totally opaque but widespread Chomskyan term (*big*) *PRO*. The advantage of *implicit* over its closest competitor, *empty*, is that it leaves open the question of whether the subject is assigned an (empty) position in the constituent structure or not.
5. The attempt by some Soviet linguists to carry over the Russian clause/phrase distinction to typologically different languages like Turkic or Nakh-Daghestanian has sometimes led to the absurd consequence that free-subject converbal clauses are regarded as clauses when they contain an explicit subject, but as phrases when their subject is left implicit (e.g., Džanmavov 1967: 238–250; Gadžiev 1956).
6. This is not an ultimate solution, but it reduces the problem to an independently existing problem, that of identifying predicates.
7. These do not coincide with the criteria discussed in Haiman–Thompson 1984. Thus, their criticism of the notion of subordination does not apply in the same way to my notion of subordination.
8. For a first contribution to the typological study of participles, see Haspelmath 1994.
9. Other terms are *supplementive adjective clauses* (Quirk et al. 1985: 427), *appositive adjectives* (cf. V. Nedjalkov, this volume: section 8). The latter seems inappropriate because *appositive* already has the other uses: (i) 'non-restrictive' (as in *appositive relative clause*); (ii) *apposition* = 'noun modification by a coreferential noun phrase'.
10. However, the parallel between Ancient Greek/Latin and Jiwari is not as complete as the example might suggest. While the Jiwari *-rnu*-form also functions as relative clause head, it is not clear that this use can be called attributive/adjectival. In many Australian languages, relative clauses are "adjoined" (Hale 1976) rather than part of the NP they modify. However, the fact that the verb of the adverbial subordinate clause shows case agreement with its controller is a striking parallel to the ancient Indo-European type.
11. The term *medial verb* comes from Papuan linguistics and was apparently first proposed by Stephen Wurm (cf. Thurman 1975). It seems that it ultimately goes back to G. Pilhofer's term *Satzinnenform*, literally 'sentence-internal form' (in his grammar of Kâte, Pilhofer 1933: 35 and passim). The parallel between Papuan medial verbs and Altaic converbs was already observed by Brockelmann (1954: 242).
12. The term *clause chaining* can be traced back at least to McCarthy 1965.
13. Longacre (1985: 264) states that "all chaining languages which have been reported to date are those in which the predicate comes clause finally". However, it remains unclear why Longacre would not consider (51) an example of clause chaining.
14. Bickel (1991: 35) explicitly refers to an analogous Turkish example as showing *Reihung* 'clause chaining'.
15. However, a special label would seem to be justified for verbless constructions as in (i).
 - (i) English (Kortmann 1991: 10)
They sat side by side, their back against a boulder.

- Such constructions seem to be peculiar to some European languages. However, it is their verbless nature that is surprising, rather than their "absoluteness".
16. Kortmann 1991 treats certain English infinitival constructions as a kind of "free adjunct", like participial "free adjuncts".
 17. For example, Perlmutter (1984: 306–308) makes a completely parallel argument for the Italian *gerundio*.
 18. Such sentences are not considered correct in modern standard Russian, but they are widely attested in the nineteenth-century literature. However, it could be that they are an artifact of artistic literature.
 19. Cf. Bybee and Dahl (1989: 82), among others, on the development of imperfectives from progressives.
 20. The complicated terminological situation in this area is also discussed in Masica (1976: 108–112) (with particular reference to South Asian languages), Kortmann (1991: 17–23) (on English), Tikkanen (1987 a: 36–37) (on Sanskrit).
 21. The term *gerund* has been used for converbs is quite a few other languages, e.g., Sanskrit (Tikkanen 1987 a), Albanian (Buchholz–Fiedler 1987), Japanese (Martin 1975), Turkic (e.g., Poppe 1963).
 22. Yet another use of *gerundive* is as a relational adjective of *gerund*, e.g., *gerundive nominalization*, *gerundive clause* (e.g., Haiman 1985: 196) – such expressions are the most confusing of all, because one does not even know whether a *gerund* or a *gerundive* are involved, let alone in what sense of these terms.
 23. Another language where the converb is generally called *participle* is Modern Greek. Like Slavic converbs, the Greek converb goes back diachronically to a participle, cf. Mirambel 1961.
 24. Masica (1976: 110) also mentions the term *verbal participle*, favored by some writers on Dravidian. *Verbal* here seems to be intended in contrast with "adjectival" participles. However, the whole point about participles and converbs is that they are verbal and adjectival/adverbial at the same time, so *verbal* is completely unsuitable to distinguish converbs from participles.
 25. According to Tikkanen (1987 a: 37), this term "originated around the middle of the nineteenth century in generally anti-Boppian German-speaking circles" of Sanskritists. (Franz Bopp used the term *gerund* for the Sanskrit converb.)
 26. The term *converb* should not be confused with the term *co-verb*, used especially in Chinese linguistics for a certain kind of grammaticalized serial verbs (cf. Bisang, this volume).
 27. In (neo-)Latin, there are two variants of this term: *converbium* (a simple compound of *con-* and *verbum*) and *converbium* (a compound formed according to the pattern "prefix + stem + *-ium*" for exocentric compounds). In English and some other modern languages the suffix *-(i)um* is simply dropped. However, the form of the dropped suffix is relevant for the derived adjective in *-al*: *converbial* or *converbial*. For example, Krueger (1962: 141) uses *converbial*. We use *converbial* because it is more straightforward, and also because a converb is indeed a kind of verb (unlike an adverb, cf. *adverbial*, or a preverb – both *adverbium* and *praeverbium* are exocentric compounds), so the endocentric compound pattern is justified. Furthermore, *converbial* was already used by Ramstedt (1903), who first proposed the term *converb* (*converbium*).

References

- Alpatov, Vladimir M.–Vera Podlesskaya
this volume "Converbs in Japanese".
- Austin, Peter
1981 "Switch-reference in Australia", *Language* 57 (2): 309–334.

Benzing, Johannes

1955 *Lamutische Grammatik*. Wiesbaden: Franz Steiner.

Bergelson, Mira B.–Andrej A. Kibrik

this volume "The system of switch-reference in Tuva: Converbial and masdar-case forms".

Bickel, Balthasar

1991 *Typologische Grundlagen der Satzverketzung: Ein Beitrag zur allgemeinen Grammatik der Satzverbindung und des Fährtenlegens*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich 9.) Zürich: Universität Zürich.

Bisang, Walter

this volume "Verb serialization and converbs—differences and similarities".

Bobran, Marian

1974 *Konstrukcje syntaktyczne z imiesłowami nieodmiennymi w języku polskim i rosyjskim* [Syntactic constructions with indeclinable participles in Polish and Russian]. Rzeszów: Wydawnictwo naukowe WSP.

Brockelmann, C.

1954 *Osttürkische Grammatik der islamischen Literatursprachen Mittelasiens*. Leiden: Brill.

Buchholz, Oda–Wilfried Fiedler

1987 *Albanische Grammatik*. Leipzig: Enzyklopädie.

Bybee, Joan L.–Östen Dahl

1989 "The creation of tense and aspect systems", *Studies in Language* 13: 51–103.

Bybee, Joan L.–William Pagliuca–Revere D. Perkins

1990 "On the asymmetries in the affixation of grammatical material", in: William Croft–Keith Denning–Suzanne Kemmer (eds.) *Studies in typology and diachrony*. (Typological Studies in Language 20.) Amsterdam: Benjamins, 1–42.

Čeremisina, Majja I.

1977 "Deepričastie kak klass form glagola v jazykax raznyx sistem" [The converb as a class of verb forms in structurally diverse languages], in: Majja I. Čeremisina (ed.) *Složnoe predloženie v jazykax raznyx sistem* [Complex sentences in structurally diverse languages]. Novosibirsk: Sibirskoe otdelenie AN SSSR, 3–28.

Džanmavov, Jusup D.

1967 *Deepričastija v kumyľeskom literaturnom jazyke (sravnitel'no s drugimi tjurkskimi jazykami)* [Converbs in standard Kumyk (in comparison with other Turkic languages)]. Moskva: Nauka.

Ebert, Karen H.

1991 "Vom Verbum dicendi zur Konjunktion—ein Kapitel universaler Grammatikentwicklung", in: Walter Bisang–Peter Rinderknecht (eds.) *Von Europa bis Ozeanien—von der Antonymie zum Relativsatz. Gedenkschrift für Meinrad Scheller*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich.) Zürich: Universität Zürich, 77–95.

Foley, William

1986 *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.

Foley, William–Robert D. Van Valin Jr.

1984 *Functional syntax and universal grammar*. (Cambridge Studies in Linguistics 38.) Cambridge: Cambridge University Press.

Fortescue, Michael

1984 *West Greenlandic*. (Croom Helm descriptive grammars.) London: Croom Helm.

Gadžiev, Magomed M.

1956 "Složnopolodčinennoe predloženie v lezginskom jazyke", [The subordinate sentence in Lezgian]. *Voprosy jazykoznanija* 5 (1): 99–106.

- Givón, Talmy
 1975 "Serial verbs and syntactic change: Niger-Congo", in: Charles N. Li (ed.) *Word order and word order change*. Austin: University of Texas Press, 47-112.
 1990 *Syntax: A functional-typological introduction*. Vol. 2. Amsterdam: Benjamins.
- Greenberg, Joseph H.
 1957 "Order of affixing: A study in general linguistics", in: Joseph H. Greenberg, *Essays in linguistics*. New York: Wenner-Gren Foundation, 86-94.
- Grévisse, Maurice
 1986 *Le bon usage: Grammaire française*. 12th edition, revised and re-edited by André Goosse. Paris: Duculot.
- Grierson, George A. (ed.)
 1903-1928 *Linguistic survey of India*. 11 vols.
 [1967-1968] [Reprinted Delhi: Motilal Banarsidass.]
- Haiman, John
 1980 *Hua: A Papuan language of the Eastern Highland of New Guinea*. Amsterdam: Benjamins.
 1985 *Natural syntax*. (Cambridge Studies in Linguistics 44.) Cambridge: Cambridge University Press.
- Haiman, John-Sandra A. Thompson
 1984 "'Subordination' in universal grammar", *Berkeley Linguistics Society* 10: 510-523.
- Haiman, John-Pamela Munro (eds.)
 1983 *Switch-reference and universal grammar*. (Typological Studies in Language 2.) Amsterdam: Benjamins.
- Hale, Kenneth L.
 1976 "The adjoined relative clause in Australia", in: Robert M. W. Dixon (ed.) *Grammatical categories in Australian languages*. (Linguistic Series 22.) Canberra: Australian Institute of Aboriginal Studies, 78-105.
- Halmøy, Jane-Odile
 1982 *Le gérondif. Éléments pour une description syntaxique et sémantique*. (Contributions Norvégiennes aux Études Romanes 6.) Trondheim: Tapir.
- Hangin, John G.
 1968 *Basic course in Mongolian*. (Indiana University Uralic and Altaic Series 73.) Bloomington: Indiana University.
- Haspelmath, Martin
 1989 "From purposive to infinitive—a universal path of grammaticization", *Folia Linguistica Historica* 10 (1-2): 287-310.
 1993 *A grammar of Lezgian*. (Mouton Grammar Library 9.) Berlin: Mouton de Gruyter.
 1994 "Passive participles across languages", in: Barbara Fox-Hopper, Paul (eds.) *Voice: Form and function*. (Typological Studies in Language 29.) Amsterdam: Benjamins.
 this volume "Contextual and specialized converbs in Lezgian".
- Hengeveld, Kees
 1992 *Non-verbal predication: Theory, typology, diachrony*. (Functional Grammar Series 15.) Berlin: Mouton de Gruyter.
- Holland, Gary B.
 1986 "Nominal sentences and the origin of absolute constructions in Indo-European", *Zeitschrift für vergleichende Sprachforschung* 99: 63-193.
- Huddleston, Rodney
 1984 *Introduction to the grammar of English*. Cambridge: Cambridge University Press.
- Kachru, Yamuna
 1981 "On the syntax, semantics and pragmatics of the conjunctive participle in Hindi-Urdu", *Studies in the Linguistic Sciences* 11 (2): 35-47.

- König, Ekkehard–Bernd Kortmann
1991 "On the reanalysis of verbs as prepositions", in: Gisa Rauh (ed.) *Approaches to prepositions*. (Tübinger Beiträge zur Linguistik 358.) Tübingen: Narr, 109–125.
- König, Ekkehard–Johan van der Auwera
1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert–Giuliano Bernini–Claude Buridant (eds.) *Toward a typology of European languages*. (Empirical Approaches to Language Typology 8.) Berlin: Mouton de Gruyter, 337–355.
- Koptjevskaja-Tamm, Maria
1993 *Nominalizations*. London: Routledge.
1994 "Finiteness", in: R. E. Asher (ed.) *The encyclopedia of language and linguistics*. Vol. 3, 1245–1248. Oxford: Pergamon Press.
- Kortmann, Bernd
1991 *Free adjuncts and absolutes in English: Problems of control and interpretation*. London: Routledge.
in press "Adverbial conjunctions in the languages of Europe", to appear in: Johan van der Auwera (ed.) *Adverbial relations in the languages of Europe*. Berlin: Mouton de Gruyter.
- Kortmann, Bernd–Ekkehard König
1992 "Categorial reanalysis: The case of deverbal prepositions", *Linguistics* 30: 671–697.
- Krueger, John R.
1962 *Yakut manual*. Bloomington: Indiana University.
- Kuno, Susumu
1973 *The structure of the Japanese language*. Cambridge, MA: MIT Press.
- Kuno, Susumu–Kaburaki, Etsuko
1977 "Empathy and syntax", *Linguistic Inquiry* 8 (4): 627–672.
- Lafitte, Pierre
1941 *Grammaire basque (Navarro-labourdin littéraire)*. Donostia: Elkar.
- Lambdin, Thomas O.
1978 *Introduction to Classical Ethiopic (Ge'ez)*. Missoula, MO: Scholars Press.
- Legendre, Géraldine
1990 "French impersonal constructions", *Natural Language and Linguistic Theory* 8: 81–128.
- Lehmann, Christian
1988 "Towards a typology of clause linkage", in: John Haiman–Sandra A. Thompson (eds.) *Clause combining in grammar and discourse*. (Typological Studies in Language 18.) Amsterdam: Benjamins, 181–225.
- Lomonosov, Mixail V.
1755 *Rossijskaja grammatika* [Russian grammar]. St. Petersburg.
- Longacre, Robert E.
1985 "Sentences as combinations of clauses". in: Timothy Shopen (ed.) 1985. *Language typology and syntactic description*. Vol. 2. *Complex constructions*. Cambridge: Cambridge University Press, 235–286.
- MacDonald, Lorna
1990 *A grammar of Tawya*. (Mouton Grammar Library 6.) Berlin: Mouton de Gruyter.
- Macdonnell, Arthur A.
1927 *A Sanskrit grammar for students*. 3rd edition. London: Oxford University Press.
- Martin, S. E.
1975 *A reference grammar of Japanese*. New Haven: Yale University Press.
- Masica, Colin P.
1976 *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press.

- Maslov, Jurij S.
1988 "Resultative, perfect and aspect", in: V. Nedjalkov (ed.) 1988, 63–85.
- McCarthy, J.
1965 "Clause chaining in Kanite", *Anthropological Linguistics* 7 (5): 59–70.
- Meščaninov, Ivan I.
1945 *Členy predložénija i časti reči* [Grammatical relations and parts of speech]. Moskva and Leningrad: Nauka.
- Mirambel, André
1961 "Participe et gérondif en grec médiéval et moderne", *Bulletin de la Société de Linguistique de Paris* 56: 46–79.
- Mohanan, K. P.
1983 "Functional and anaphoric control", *Linguistic Inquiry* 14: 641–674.
- Müller-Bardey, Thomas
1990 "Koprädikation als grundlegende syntaktische Operation", in: Seiler, Hansjakob et al. (eds.) *Internationales interdisziplinäres Kolloquium "Sprache und Denken: Variation and Invarianz in Linguistik und Nachbardisziplinen"*, Lenzburg/Schweiz, 16.–19. Mai 1989. Vol. 2. (Arbeiten des Kölner Universalienprojekts 81.) Köln: Institut für Sprachwissenschaft der Universität zu Köln.
- Munro, Pamela
1983 "When 'same' is not 'not different'", in: Haiman–Munro (eds.) 1983: 223–243.
- Nedjalkov, Igor' V.
this volume "Converbs in Evenki".
in press "Converbs in the languages of Europe", to appear in: Johan van der Auwera (ed.) *Adverbial relations in the languages of Europe*. Berlin: Mouton de Gruyter.
- Nedjalkov, Vladimir P.
1988 *Typology of resultative constructions*. (Typological Studies in Language 12.) Amsterdam: Benjamins.
1990 "Osnovnye typy deepričastij" [Typological parameters of converbs], in: Viktor S. Xrakovskij (ed.) *Tipologija i grammatika*. Moscow: Nauka, 36–59.
this volume "Some typological parameters of converbs" [Translation of V. Nedjalkov 1990].
- Nedjalkov, Vladimir P.–Sergej Je. Jaxontov
1988 "The typology of resultative constructions", in: V. Nedjalkov (ed.) 1988: 3–62.
- Nedjalkov, Vladimir P.–Igor' V. Nedjalkov
1987 "On the typological characteristics of converbs", in: Toomas Help (ed.), *Symposium on language universals*. Tallinn, 75–79.
- Nichols, Johanna
1978 "Secondary predicates", *Berkeley Linguistics Society* 4: 114–127.
- Payne, Thomas E.
1991 "Medial clauses and interpropositional relations in Panare", *Cognitive Linguistics* 2 (3): 247–281.
- Perevoščikov, Petr N.
1959 *Deepričastija i deepričastnye konstrukcii v udmurtskom jazyke* [Converbs and converbal constructions in Udmurt]. Iževsk: Udmurtskoe knižnoe izdatel'stvo.
- Perlmutter, David M.
1984 "Working 1s and Inversion in Italian, Japanese, and Quechua", in: David M. Perlmutter–Carol G. Rosen (eds.) *Studies in relational grammar* 2. Chicago: University of Chicago Press, 292–330.

- Pilhofer, G.
1933 *Grammatik der Kâte-Sprache in Neuguinea*. Berlin: Reimers.
[1969] [Reprinted Nendeln (Liechtenstein): Kraus.]
- Plank, Frans
1985 "Prädikativ und Koprädikativ", *Zeitschrift für Germanistische Linguistik* 13 (2): 154–185.
- Poppe, Nicholas
1963 *Tatar manual*. Bloomington: Indiana University.
- Pusch, Luise F.
1980 *Kontrastive Untersuchungen zum italienischen 'gerundio'. Instrumental- und Modalsätze und das Problem der Individuierung von Ereignissen*. (Linguistische Arbeiten 69.) Tübingen: Niemeyer.
- Quirk, Randolph–Sidney Greenbaum–Geoffrey Leech–Jan Svartvik
1985 *A comprehensive grammar of the English language*. London: Longman.
- Ramstedt, Gustaf John
1903 *Über die Konjugation des Khalkha-Mongolischen*. (Mémoires de la Société Finno-Ougrienne 19.) Helsingfors: Société Finno-Ougrienne.
- Rappaport, Gilbert C.
1984 *Grammatical function and syntactic structure: the adverbial participle of Russian*. (UCLA Slavic Studies 9.) Columbus, OH: Slavica Publishers.
- Reese, Susanne
1991 *Grundalkonstruktionen im Spanischen: Ansatz zu einer grammatisch-pragmatischen Beschreibung*. (Tübinger Beiträge zur Linguistik 349.) Tübingen: Narr.
- Reesink, Ger
1983 "Switch reference and topicality hierarchies", *Studies in Language* 7 (2): 215–246.
- Roberts, John R.
1988 "Amele switch-reference and the theory of grammar", *Linguistic Inquiry* 19 (1): 45–63.
- Ross, John R.
1967 *Constraints on variables in syntax*. [Unpublished Ph. D. dissertation, MIT.]
- Rowlands, E. C.
1969 *Yoruba*. (Teach Yourself Books.) London: Hodder and Stoughton.
- Saidov, Magomedasjid
1967 *Avarsko-russkij slovar'* [Avar-Russian dictionary]. Moscow: Sovetskaja ěnciklopedija.
- Saxena, Anju
1987 "The grammaticalization of the verb 'say': Cross-linguistic and diachronic evidence", Paper presented at the Third Annual Pacific Linguistics Conference, University of Oregon, Eugene.
1988 "On syntactic convergence: the case of the verb 'say' in Tibeto-Burman", *Berkeley Linguistics Society* 14: 375–388.
- Scancarelli, Janine
1992 "Clause-combining constructions", in: William Bright (ed.), *International encyclopedia of linguistics*. Vol. 1. New York: Oxford University Press, 267–269.
- Schlegel, August Wilhelm von
1820 "Ausgaben indischer Bücher: Nalus", *Indische Bibliothek* 2: 96–128.
- Schumacher, R.
1977 *Untersuchungen zum Absolutiv im modernen Hindi: Ein Beitrag zur semantischen Syntax*. (Europäische Hochschulschriften 27:1.) Frankfurt/Bern: Lang.
- Storik, Petr Ja.
1977 *Grammatika ěukotskogo jazyka. Ćast' 2-gja: glagol, nareěie, služebnye slova* [Grammar of Chukchi. Part 2: the verb, the adverb, function words]. Leningrad: Nauka.

- Stassen, Leon
1985 *Comparison and universal grammar*. Oxford: Blackwell.
- Švedova Natal'ja Ju.—Vladimir V. LOPatin (eds.)
1989 *Kratkaja russkaja grammatika* [Short Russian grammar]. Moscow: Russkij jazyk.
- Thurman, R.
1975 "Chuave medial verbs", *Anthropological Linguistics* 17: 342–352.
- Tikkanen, Bertil
1987a *The Sanskrit gerund: a synchronic, diachronic and typological analysis*. (Studia Orientalia 62.) Helsinki: Finnish Oriental Society.
1987b "Finiteness and non-finiteness as parameters in clause linkage", in: Pirkko Lilius–Mirja Saari (eds.) *The Nordic languages and modern linguistics 6. Proceedings of the Sixth International Conference of Nordic and General Linguistics in Helsinki, August 18–22, 1986*. Helsinki: Helsinki University Press, 405–419.
this volume "Burushaski converbs in their South and Central Asian areal context".
- Trubinskij, Valentin I.
1988 "Resultative, passive and perfect in Russian dialects", in: V. Nedjalkov (ed.) 1988, 389–409.
- Válčková, Nevena
1988 "Nepravilna upotreba na deepričastni konstrukcii v bálgarskija i polskija ezik" [Incorrect use of converbal constructions in Bulgarian and Polish]. *Săpostavitelno ezikoiznanie* 13 (4): 80–86.
- von Gabain, Annemarie
1941 *Altürkische Grammatik*. Wiesbaden: Harrassowitz.
- Weber, David John
1989 *A grammar of Huallaga (Huánuco) Quechua*. (University of California Publications in Linguistics 112.) Berkeley: University of California Press.
- Weiss, Daniel
1977 *Syntax und Semantik polnischer Partizipialkonstruktionen*. (Slavica Helvetica 10.) Bern: Peter Lang.
- Williams, Edwin
1980 "Predication", *Linguistic Inquiry* 11: 203–238.
- Zandvoort, R. W.
1957 *A handbook of English grammar*. London: Longman.

The meaning of converb constructions

Ekkehard König

1. Introduction

In the preceding paper the notion “converb” is defined by describing typical formal properties of converbal constructions, by delimiting them from related constructions and by discussing parameters of variation exhibited by converbs across languages. The present paper rounds off the introductory part of this book by introducing the relevant distinctions, issues and problems arising in the semantic analysis of converbs and their interpretation in specific contexts and thus providing the basis for a semantic analysis of converbs in different languages. The questions that will be discussed include the following: Which types of converbs can we distinguish on the basis of semantic criteria? Are converb constructions multiply ambiguous (polysemous) or vague (unspecific) in those cases where one form may be associated with several interpretations? What are the possible targets in the interpretation of converbs, how are the relevant circumstantial relations defined and delimited from one another? What are the syntactic, semantic and pragmatic factors that contribute to the interpretation of a converb construction as “conditional”, “temporal”, “clausal”, “concessive” or “instrumental” in specific contexts? Under which conditions can converbs be focused or backgrounded and what are their scopal properties relative to other scope-bearing expressions in the same sentence?

Such problems of meaning and interpretation are difficult to deal with from a cross-linguistic perspective, especially since the literature on which such a semantic discussion can be based is not as rich as the literature evaluated in the preceding paper. Easily accessible in-depth studies of the interpretation of converbs are mainly available for various European languages such as German (Rath 1971; Bungarten 1976), Polish (Weiss 1977), Russian (Boguslavskij 1977; Rappaport 1984), Italian (Pusch 1980), French (Halmøy 1982), English (Stump 1985; Kortmann 1991) and Spanish (Reese 1991). Similarly detailed information was available to the author for only a few non-European languages such as Japanese (Kuno 1986), Hindi-Urdu (Davison 1981; Kachru 1981) and the languages analyzed in this book. It is therefore not surprising that this paper is primarily based on data from European languages. After all, questions of meaning and interpretation are best discussed in connection with languages and data thoroughly familiar to the analyst.

2. Semantic typology

Following V. Nedjalkov (this volume), we can distinguish three main types of converbal constructions on the basis of purely semantic criteria: (i) *specialized converbs* are associated with only one or two circumstantial (“adverbial”) interpretations regardless of the context; (ii) *contextual converbs* may have a wide variety of circumstantial interpretations depending on the cotext and context and (iii) *narrative converbs* merely express a “coordinative connection”, typically between more than two events, such that the plot is advanced. The order in which these three types are listed above is one of decreasing specificity of meaning. Moreover, Nedjalkov regards these three types as “ideal types”, so that actual data exhibit varying degrees of approximation to these types and more than one type may be found in a specific language. Specialized converbs are found, for example, in Korean, Japanese, Mari, Evenki and Udmurt. It is to be expected and is indeed typically the case that such languages have several converbal markers. Japanese, for instance, has the converbal affixes *-tara*, *tari*, *-tatte*, *-ini*, *-temo*, etc., each with its own interpretation or range of interpretations (cf. Alpatov–Podlesskaya, this volume) and Korean is generally analyzed as having more than fifty such converbal markers. The converbal constructions of Romance and Slavic languages, of Latin and English, on the other hand, are instances of the contextual type.¹ In these languages there is only one converbal affix (*-ing* in English, *-ndo* in Italian) or perhaps two (*-a* and *-v* in Russian) and the interpretation of a converb in a specific utterance is the result of an interaction between a basic vague meaning of the converb and a wide variety of syntactic, semantic and contextual factors. The range of possible interpretations may be subject, however, to language-specific restrictions. The *gérondif* in French, for example, is incompatible with a resultative or a purposive interpretation and Russian allows a wider range of possible interpretations for converbs than do the other Slavic languages. Narrative converbs can be found in the Turkic languages, in Mongolian, in Tamil, Manchu and Nivkh. In these languages chains of several converbs are used in narratives. Some languages seem to have two or even all three of these construction types. In Turkish, converbs with the suffixes *-ince* and *-erken* invariably result in a temporal interpretation and are thus markers of specialized converbs, *-ip* is a marker of narrative converbs, whereas *-erek* allows a wide range of interpretations and can thus be analyzed as a marker of contextual converbs (cf. Slobin, this volume; Johanson, this volume). Lezgian has both specialized and contextual converbs (cf. Haspelmath, this volume) and Japanese has the narrative *-te* converb in addition to the specialized converbs mentioned above.

3. Vagueness or polysemy

In accepting V. Nedjalkov's distinction between specialized, contextual and narrative converbs as an interesting semantic typology, I have already taken a stand on one of the most important controversies in the semantic analysis of converbs, the question of whether converbal forms compatible with a wide variety of interpretations are polysemous (multiply ambiguous) or vague in their meaning.² This issue has received a great deal of attention and there has been much controversy over the analysis of the relevant forms in European languages. The polysemy view is supported, *inter alia*, by Pusch (1980), Kachru (1981), Apresjan (1983) and partly also by Boguslavskij (1977), whereas Stump (1985), Kortmann (1991), Parisi–Castelfranchi (1976), Halmøy (1982), Rappaport (1984) and Davison (1981) regard the meaning of converbs in the relevant languages as essentially vague and unspecific. Let us briefly consider the arguments typically brought forward in support of each of these two opposing views. Three different arguments can be distinguished in the pleas for polysemy mentioned above:

i. The full range of utterance meanings associated with converbs cannot be based on the vague, general *Gesamtbedeutung* put forward by supporters of the vagueness view. This general meaning is either so unspecific as to be totally unilluminating or too specific to be compatible with all possible interpretations in context. The latter point is essentially the criticism put forward by Pusch (1980) against the analysis developed by Parisi and Castelfranchi for the Italian *gerundio*. The assumption made in Parisi–Castelfranchi (1976) that an abstract predicate *aggiunta* 'adjunction' underlies the *gerundio*, the preposition *con* 'with' as well as the coordinating conjunction *e* 'and' is untenable in Pusch's view since it does not provide a suitable basis for the conditional interpretation a *gerundio* may also have. To illustrate this point with an example from English, a converb with a conditional interpretation like the following does not permit a paraphrase with *and* (cf. Stump 1985: 16):

- (1) *The same thing, happening in wartime, would amount to disaster.*

What this argument essentially shows is that the basic meaning of converbs cannot simply be that of the conjunction *and*.

ii. The mechanism for enriching and elaborating the vague basic meaning on the basis of several syntactic, semantic and contextual factors has never been explicated in detail. Moreover, to leave everything that is interesting about the meaning of converbs to such a procedure would put too high a demand on such an interpretative mechanism.

iii. Specific interpretations of converbs are often associated with specific “formal” or “structural” properties.

What the first and the second of these arguments really do is identify important problems for the vagueness view rather than support an analysis in terms of polysemy. The semantic contribution made by the converb itself to utterance meaning must certainly be analyzed in such a way as to be a suitable basis for all possible interpretations. A more suitable candidate for such an indeterminate basic meaning than the one proposed by Parisi and Castelfranchi seems to be Stump’s analysis of free adjuncts in English as temporal abstracts, i. e., as expressions having the form of sentences but denoting a set of time intervals. The second argument also identifies an important task for the vagueness view: a convincing explication and demonstration of how the process of interpretative augmentation and elaboration works is certainly an important ingredient of the vagueness view.

A more detailed look at the third argument shows that the so-called “structural” properties associated with specific interpretations of converbs are really semantic properties or properties of additional expressions that contribute to the overall meaning, so that arguments of this type are really arguments in favor of vagueness. It is, for example, a well-known fact that only adverbials of the same type may be coordinated and thus not surprising that converbs associated with a specific interpretation, as in the following example from Hindi-Urdu, cannot be coordinated with adverbials of a different semantic type:

- (2) Hindi-Urdu (Kachru 1981: 44)
**vah mere kamre me aa-kaar aur thak kar so gayaa.*
 he my room in come-CONV and tired CONV sleep went
 ‘He went to sleep after coming into my room and because he was tired.’

Moreover, examples like (3) do have two interpretations, but not as a result of “structural ambiguity”, as claimed by Kachru:

- (3) Hindi-Urdu (Kachru 1981: 43)
usne ghar aa-kaar bhii khaanaa nahī khaayaa.
 he home come-CONV even/also meal not ate
 a. ‘He did not eat even though he came home.’
 or
 b. ‘He did not eat after coming home either.’

The two interpretations are the result of two possible interpretations of the focus particle *bhii*, which takes the preceding converb as focus and may be either interpreted in a scalar sense like English *even* or in a nonscalar sense like English

also, too. The existence of a focus particle with an indeterminate meaning allowing either of these two interpretations is a widespread phenomenon in the world's languages (cf. König 1991 a). Interpretation (b) is the result of the additive interpretation of *bbii* together with the perfective interpretation of the converb:³ "also having come *home* he did not eat". The other interpretation, (a), is a consequence of interpreting *bbii* in a scalar sense and of the simultaneous reading of the converbs. This scalar use of the particle leads to a concessive conditional interpretation of the converb if it occurs in a hypothetical context and to a concessive interpretation if it occurs in a factual context. A parallel phenomenon can be observed in the following examples from English:

- (4) a. *Even wearing that hat you would be recognized immediately.*
 b. *... and at first, even remembering the excellent meal Aunt B. had fed her the night before, Meg hesitated to taste.*

In contrast to *also*, which characterizes its focus value as just another value satisfying a certain propositional schema, *even* characterizes its focus value as an extreme and thus maximally informative value for the propositional schema expressed by the rest of the sentence.

In addition to these considerations and facts, which clearly argue against the polysemy view, there are also specific arguments in favor of vagueness:

i. A semantic analysis of expressions or constructions in terms of polysemy must quite generally be considered as the "lazy man's approach", which should only be resorted to if all more ambitious endeavors have failed. Examples like (5) and (6) show that the interpretation of a converb construction is largely determined by the surrounding co-text:

- (5) English (Stump 1985: 66)
 a. *Walking home, John saw Mary.* [temporal, simultaneous]
 b. *Walking home, John often watches for eagles.* [temporal, general]
 c. *Walking home, John would have seen the new billboards.* [counterfactual conditional]
- (6) Russian (Boguslavskij 1977: 291)
 a. *Raz"ezžaja po strane, on navel spravki o syne.*
 travel:IMPF.CONV around country he made inquiries about son
 'Travelling around the country, he made inquiries about the son.'
 [temporal]
 b. *Raz"ezžaja po strane, on navedet spravki o syne.*
 travel:IMPF.CONV around country he will.make inquiries about son
 son

'Travelling around the country, he will make inquiries about the son.' [conditional/temporal]

- c. *Raz"ezžaja po strane, on priobretet obširnye
travel:IMPF.CONV around country he will.acquire broad
žnanija.*
knowledges

'Travelling around the country, he will acquire broad knowledge.'
[instrumental]

In (6) it is the tense, aspect and *Aktionsart* of the verb in the main clause that make an important contribution to the interpretation of the converb construction. In (5), the relevant factors are the modal verb in (5 c) and the frequency adverbial in (5 b), as opposed to the specific factual context provided by the main clause in (5 a). As has been shown in studies like Halmøy (1982), Stump (1985), Kortmann (1991) and also in Pusch (1980), a wide variety of such factors can be identified as playing a decisive role in the interpretation of converbs in specific utterances in addition to the constructional meaning of such grammatical forms itself. If the contribution made by all those factors is read into the converb itself, important generalizations will be missed. A detailed discussion of the role and interplay of such factors will be presented below.

ii. Polysemy is an idiosyncratic fact about languages, with no parallels or hardly any parallels across languages.⁴ The different interpretative options available for free adjuncts in English, however, have a clear parallel in a wide variety of languages, even if the range of interpretative options available for converbs in English may differ slightly from that found for the Italian *gerundio* or the French *gérondif*. Such parallels in the interpretation of constructions or lexical items make an analysis in terms of polysemy highly implausible. Moreover, the interpretative dependence of converbs on the rest of the sentence and on the contextual background has a clear parallel in the indeterminacy of certain prepositional phrases. In addition to semantically very specific prepositions like *despite* (concessive), *because of* (causal) or *instead of* (substitutive), there are also very unspecific prepositions and conjunctions like *with* or *as* in English, or *als* and *bei* in German. The interpretation of the following examples with German *bei* and thus their translation into English, which lacks such an all-purpose circumstantial preposition, depends on whether the main clause is factual or hypothetical, whether some kind of connection is assumed between the situations described in the two clauses or not, what kind of connection it is, etc. In other words it depends on exactly the kind of features relevant for the interpretation of converbs.⁵

- (7) a. *Bei schlechtem Wetter werde ich mit dem Zug fahren.*
with bad weather will I with the train go
'If the weather is bad, I will take the train.'

- b. *Bei diesem Nebel solltest du mit dem Zug fahren.*
with this fog should you with the train go
'You should take the train in this fog.'
- c. *Bei deiner Hochzeit werde ich da sein.*
with your wedding will I there be
'When you get married I will be there.'
- d. *Bei ständig sinkendem Einkommen gibt Paul mehr und mehr Geld aus.*
with steadily decreasing income spends Paul more and more money out
'In spite of a steadily decreasing income, Paul is spending more and more money.'

The interpretative mechanisms of assigning a specific proposition to converbs in specific contexts are thus also needed for other adverbials.

iii. Finally, there are data in many languages to which several or no specific circumstantial interpretations can be assigned. Example (8) from French has a temporal reading, which can be augmented to a causal reading:

- (8) French (Halmøy 1982: 241)
Les enfants criaient de joie, en voyant passer le bateau.
the children cried of joy CONV see:CONV pass the boat
'The children cried out loud with joy, when [i.e., because] they saw the boat.'

For the following example from English, on the other hand, no circumstantial label seems to be appropriate and a simple coordination with *and* would be the best translation into a language like German or Norwegian, which make only a very restricted use of adverbial participles.

- (9) *Watching with his cold yellow eyes, D. understood the anger of the blind woman perfectly.*

For cases like these a very unspecific, indeterminate meaning has to be assumed in any case.

There is a further argument for the polysemy view which has neither been mentioned nor been refuted so far, namely the fact that there are some clear, if subtle, differences in the interpretation of converbs of the same general type in different languages. Some examples of such differences were given above and further examples will be given in later sections. If such differences cannot be analyzed as being due to language-specific differences in the underlying meaning of converbs or to some specific properties of the language in question, they

present genuine problems for the vagueness view. At the moment we simply do not know enough about such differences between languages and the way they interact with other language-specific properties to deal with such problems satisfactorily.

4. Range of possible interpretations

A general survey of the questions, features and problems involved in the analysis of the meaning of converb constructions would be incomplete without a brief look at the notional domain which provides the main target for the interpretation of these constructions, namely the domain of circumstantial relations. Such relations can be overtly expressed by adpositions, conjunctions or conjunctive adverbs ("conjuncts"). To give a few examples from English: *in spite of* (preposition), *although* (conjunction) and *nevertheless* (conjunctive adverb) express concessive relations; *during* (preposition), *while* (conjunction) and *meanwhile* (conjunctive adverb) express temporal relations (simultaneity); and *because of*, *because* and *therefore* express causal relations. Specialized converbs have a meaning directly expressible in terms of one of these connectives. In the case of contextual converbs, by contrast, an interpretation in terms of such circumstantial relations may be the result of an interaction of several factors, but it is of course also possible that such converbs do not receive a fully determinate interpretation of this kind.

The terminological inventory available for the identification and differentiation of various circumstantial relations includes such terms as "local", "temporal", "manner", "comparative", "instrumental", "causal", "purposive", "conditional", "attendant (accompanying) circumstance", "substitutive", "concessive", "concessive-conditional", "resultative", etc.⁶ Some of these distinctions are well-established ones, other terms like "substitutive" or "concessive-conditional" are more recent additions to this list: The term "substitutive" is used for the relation expressed in English by *instead of* and the term "concessive-conditional" (or "conditional-concessive") is used for adverbial clauses like *Whatever I say no one listens to me* or *Even if I have important things to say no one listens to me* and neatly captures the fact that such constructions share semantic properties with both conditionals and concessive sentences proper. A semantic description of converb constructions makes sense, of course, only if these notions can be clearly explicated, defined and delimited from one another. In what follows I will therefore discuss some aspects and problems of definition, explication and delimitation and in doing so I will summarize some recent contributions made to such issues within the context of work on adverbials in general and on converbs in particular.

4.1. Definition and differentiation

For some circumstantial relations the basic outlines of a definition are reasonably clear. It is reasonably clear, for instance, that time adverbials provide a temporal setting for a situation and how they interact with various types of predications. Or, to give another example, it is reasonably clear that a purposive clause introduced by *in order to* is a specific type of causal construction (*He went out to buy some bread* = *He went out because he wanted to buy some bread*). Of course, there are notorious problems and unresolved controversies. For example, can causal constructions (*q* because/since *p*) be explicated in terms of simple conditionals (*p* & *q*, if *p*, *q*) or in terms of counterfactual conditionals (*p* & *q*, if not-*p*, not-*q*), to what extent does material implication capture the meaning of natural language conditionals, etc. But at least the outlines of a definition and the problems are clear and there are hardly any problems of applying the relevant labels to actual data.

A good deal of confusion, by contrast, can be found in the use of the labels “manner” and “modal”. Pusch (1980) and Halmøy (1982) have shown that a sharp distinction needs to be drawn between “manner” and “attendant circumstance”. The former term should only be used for sentences describing two aspects or dimensions of only one event. The same-subject constraint that is invariably associated with this interpretation is a natural consequence of this semantic fact:

- (10) a. French
Elle traversa le fleuve en nageant.
 She crossed the river swimming.
 ‘She swam across the river.’
- b. Italian (Pusch 1980: 157)
Grazie, disse balbettando.
 Thanks he said stammering.
 ‘Thanks, he stammered.’
- c. Hindi-Urdu (Kachru 1981: 47)
sisak-sisak-kar roo-na
 sob-sob-CONV cry-INF
 ‘to cry sobbingly/to sob’
- d. English (Stump 1985: 332)
Now Kirk, talking enthusiastically, like a football coach, tells the press that the Kennedy forces are picking up a great deal of support on the vote on the rule.

In examples like (10), the converbs specify a dimension or parameter implicitly given in the meaning of the verb in the main clause: the type of motion for a

verb expressing motion and direction, a way of crying, a style of speaking, etc. In each case both verbs relate to one and the same event or action. Given this basic requirement for an interpretation as “manner”, it is not surprising that such combinations of main verb plus converb should often correspond to a single verb in other languages or manifest a tendency towards lexicalization.

The term “attendant circumstance”, by contrast, should be used for cases where two independent events or actions are involved, either of which could be stopped without affecting the other, but which manifest a unity of time and place and thus also a “perceptual unity”.

(11) French (Halmøy 1982: 290)

- a. ... *dit-il en se levant*
said-he CONV self raise:CONV
'... he said standing up'
- b. *Il la regarda encore, tout en lui*
he her looked again still CONV to.her
caressant les cheveux.
caress:CONV the hairs
'He looked at her again, still caressing her hair.'

The adverb *tout* in French combines almost exclusively with a *gérondif* in this function of expressing “attendant circumstance”.

Another notional category to whose explication Pusch (1980) has made an important contribution is the category “instrumental”. Like sentences with manner adverbials, sentences with instrumental adverbials describe one single action from two different angles. Only main clauses describing actions combine with instrumental adverbials. Furthermore, the verb in the main clause must be neutral in its meaning with respect to the method of performing the action in question, a requirement which is fulfilled by “earning money” but not by “singing”, which necessarily involves the voice as instrument:

(12) Italian (Pusch 1980: 107)

- C'è una donna che guadagna danaro accompagnando*
there is a woman who earns money accompany:CONV
nuovi membri.
new members
'There is a woman who earns money by accompanying new members.'

(13) *Using a sharp knife he cut the bread into four pieces.*

Within the broad category “instrumental”, a specific subtype can be distinguished which lacks the intentional meaning that instrumental constructions

characteristically have and which can be paraphrased by “p amounts to doing q”. The term “interpretative” seems to be very appropriate for these cases, since one of the two verbs provides a basic description, whereas the other expresses a further interpretation:

- (14) French (Halmøy 1982: 260)
En tuant sa mère ... il a aussi assassiné le rêve.
 CONV kill.CONV his mother he has also killed the dream
 ‘In killing his mother he has also killed the dream.’
- (15) *Not introducing her to any of his colleagues, George offended Sheila in a way that she had never thought possible.* (Kortmann 1991: 175)

In her typology of uses for the *gérondif* in French, Halmøy assigns such examples to a special type.

4.2. Relatedness

The inventory of circumstantial relations given above should not simply be thought of as an unstructured list of notional categories, but more as a network whose points are linked by certain paradigmatic relations and may share certain properties with other points in this network. As already mentioned, purposive relations are a variety of causal relations; resultative relations are the converse of causal relations (*He had worked very hard, so that he passed the exam easily* – *Since he had worked very hard he passed the exam easily*) and there is good evidence that concessive relations should be analyzed as the dual counterpart of causal relations (cf. König 1991b). Moreover, if certain pairs of circumstantial relations are considered it becomes clear that they share certain features and are differentiated by others. This fact is highly relevant for the interpretation of converbs since a change in one single feature or parameter may result in a different interpretation.

Let us consider a few examples. Conditional, causal, instrumental and also concessive relations presuppose some kind of connection (tendency, regularity, etc.) between the two relevant events, processes or states and this property differentiates them from relations such as “manner”, “time”, “attendant circumstance”, etc. In the following minimal pair the second example is interpreted as expressing an instrumental relation because of the general experience that water can be used to extinguish fire whereas no kind of music will have such an effect:

- (16) French (Halmøy 1982: 231)
 a. *Il a éteint le feu en sifflotant.*
 he has put.out the fire CONV whistle:CONV
 ‘He put out the fire whistling a tune.’

- b. *Il a éteint le feu en pissant dessus.*
 he has put.out the fire CONV urinate:CONV on.it
 'He put out the fire by urinating into it.'

The assumption that conditional constructions overtly characterized as such express some kind of connection is not a totally uncontroversial one. There is after all an old analysis supported *inter alia* by H. P. Grice (1975), according to which the meaning of natural language conditionals can adequately be represented by the truth conditions formulated for material implication in propositional logic ($p \rightarrow q \equiv \sim p \vee q$). According to this materialist view, the connection frequently expressed by natural language conditionals is purely a matter of pragmatics. But this view has only very few supporters among the more recent analyses of conditionals. The sequential relations typically expressed by natural language conditionals and grammaticalized in their form (*if ... then*) are incompatible with the materialist position and provide support for the view that conditionals and causal constructions are closely related. What differentiates conditionals, on the one hand, and causals, instrumentals and concessives, on the other, is that the latter are factual, whereas the former are hypothetical. Causal, instrumental and concessive constructions entail the propositions expressed by the two clauses combined in these constructions, whereas conditionals do not. The parameters which have an important influence on whether a construction is factual or hypothetical in this sense are the tense, aspect and mood of a sentence and given the similarity among the four relations under discussion, a change in the tense, aspect or mood will often result in a change from conditional to causal or instrumental, as in the following examples from French (Halmøy 1982: 229):

- (17) a. *Vous réussiriez mieux en procédant avec plus de méthode.*
 you would:succeed better CONV proceed:CONV with more of method
 'You would be more successful if you proceeded more methodically.'
- b. *Vous avez réussi mieux en procédant avec plus de méthode.*
 you have succeeded better CONV proceed:CONV with more of method
 'You have been more successful by proceeding more methodically.'

A parallel minimal contrast also differentiates between concessive conditionals and concessives:

- (18) a. *Even working night and day, he would not be able to finish the job in time.*
 b. (cf. 4b) *... even remembering the delicious meal Aunt B. had fed her the night before, Meg hesitated to taste.*

Causal and concessive constructions share the property of being factual as well as the property of presupposing some kind of general connection between two types of situations, a presupposition that is either expressible as a conditional or a generic sentence.⁷ What differentiates between them is the fact that the propositions asserted by a causal construction are in harmony with this general principle, regularity or tendency (i.e., $p \ \& \ q$, if p then q), whereas concessive constructions imply two facts which are in conflict with such a principle or regularity ($p \ \& \ q$, if p then not- q).

- (19) a. *Since Peter is sick, he is not going to his office.*
 b. *Although Peter is sick he is going to his office.*
 c. $p = [\text{Peter is sick}]; q = [\text{Peter is going to his office}]$
 d. *If one is sick one does not go to one's office.*

It is exactly this minimal contrast of being in harmony or in conflict with a general background assumption that is responsible for a causal interpretation of the first and a concessive interpretation of the second example:

- (20) a. *Knowing sleep would elude him, he remained in the study ...*
 b. *How can the Tory party commit itself to such open-ended expenditure, not knowing how many schools will take up the scheme, when there are so many more important areas to spend money on.*

On the other hand, concessive relations form a minimal contrast with attendant circumstances. The former express remarkable cooccurrence of two situations—remarkable since their assertion goes against some general tendency—whereas the latter express a purely fortuitous cooccurrence of two situations. Given this similarity, it does not come as a surprise that both concessive relations and attendant circumstances are frequently signalled in French by *tout* plus the *gérondif*:

- (21) a. *Il mangeait, tout en parcourant le journal qu' il avait*
 he ate still CONV browse:CONV the paper that he had
déployé devant lui.
 spread out before him
 'He was eating, (at the same time) browsing through the newspaper
 he had spread out before him.'
 b. *Mais tout en accusant ma nature, je me*
 but still CONV accuse:CONV my temperament I myself

savais incapable de la dompter.

knew incapable of it control

'But even though I accused my temperament, I knew that I was incapable of controlling it.' (Halmøy 1982: 377)

Another interesting minimal contrast opposes attendant circumstances to temporal relations. Not all converbs are suitable for establishing a temporal coordinate. The factors that play a role *inter alia* are the *aktionsart* of the nonfinite verb – states are less suitable than events or processes – but also general world knowledge about conventional links between times and certain activities. In the following minimal pair, we are much more likely to interpret the first example in a temporal sense than the second example, given that there are conventional times for shaving, but not for singing:

(22) French (Halmøy 1982: 286)

- a. *Je chante en me rasant.*
I sing CONV myself shave:CONV
'I sing (while) shaving.'
- b. *Je me rase en chantant.*
I myself shave CONV sing:CONV
'I shave, singing (a song).'

4.3. A partial order

In addition to the structure imposed on the set of circumstantial relations by shared and differentiating properties (factual versus hypothetical, remarkable versus fortuitous cooccurrence, etc.) and certain paradigmatic relations (converseness, hyponymy, etc.), there seems to be an additional structure. Taking up an idea first formulated in Foley–Van Valin (1984), Levinson (1987) and Kortmann (1991: 118–121) have argued that circumstantial relations can be ordered along a scale of informativeness and/or cognitive complexity. The criterion is the amount of knowledge and/or contextually provided evidence required for the identification of a specific relation and the order seems to be a partial one rather than a strict one. The degree of informativeness is not easy to assess, but on the basis of the discussion in the preceding section it is intuitively plausible to claim that “attendant circumstance” is a very weak relation and “concessivity” a very informative relation, that causal relations are more informative than temporal ones and that instrumental relations are slightly more informative than causal relations since they share a general background assumption (“there is a connection between *p* and *q*”) with the latter, but also indicate that two descriptions relate to one and the same action. However vague such considerations

might be, they are interesting and highly suggestive because various other criteria also indicate that circumstantial relations can be ordered on a scale: (i) the availability of simple deictic adverbs and interrogative pronouns; (ii) the direction of semantic change; (iii) the order of acquisition; (iv) the availability of adverbial noun phrases, etc. In a wide variety of languages simple adverbs (*here, now, so*) and simple interrogative pronouns (*where, when, how, why*) are only available for the more simple relations "place", "time", "manner", "cause". And the first three of these relations also provide the main sources for semantic changes whose targets are the more complex relations. That local, temporal and manner expressions are acquired earlier than expressions of other circumstantial relations is well known and adverbial noun phrases also tend to be found across languages in these three notional domains (*He left the very next day, I did it my way*).

For the topic under discussion, i. e., the interpretation of converbal constructions, these considerations are relevant because in many cases specific constructions may receive more than one interpretation: a simple one as well as a more complex one. And this process of interpretative enrichment follows the order based on the criteria discussed above. In many cases combinations of finite verbs and converbs can simply be interpreted as sequences of events, more or less like paratactic combinations of clauses, but they may also receive a more specific interpretation. In the following two examples this more specific interpretation would be an adversative one ("but"):

- (23) a. *Lady Helen listened at the heavy panels of St. James' bedroom door, hearing nothing.* (George 1991: 107).
 b. *He smiled, making no comment.*

A temporal interpretation may often be augmented to a causal one:

- (24) French (Halmøy 1982: 241)
Il se tourna vers la vieille qui avait repris
 he himself turned to the old.woman who had again.taken
un air de vivante tout à coup, en entendant parler de
 a look of alive suddenly CONV hear:CONV talk of
vongole.
 vongole
 'He turned to face the old woman, who suddenly looked again more
 alive hearing us talk about (spaghetti) vongole.'

And, to give another example, a temporal ("anteriority") interpretation may be enriched to a concessive one if the context is incompatible with the relevant background assumption ("inconsistency between specific situation and general tendency"):

- (25) *Having treated me at first as a notorious troublemaker, they became after a while extremely solicitous.*

Another interesting question in this context is whether particular interpretations require and are thus associated with more explicit coding. In a variety of languages concessive relations seem to receive such additional coding, i.e., an adverb or connective clearly signals that a converbal construction is intended to have a concessive interpretation (cf. Kortmann 1991: 160–164).

Not all of the circumstantial relations discussed in this section are relevant for the interpretation of converbs. There does not seem to be a language in which converbal constructions are interpreted as expressing a local relation. Apparently, verbs and verb phrases are capable of establishing a temporal coordinate, but not a local one. Furthermore, there are language-specific constraints on interpretation, which are quite plausibly linked to certain formal properties of converbs in a language. The French *gérondif*, for example, does not permit a resultative, a purposive or a comparative interpretation (Halmøy 1982: 222). Free adjuncts and absolutes in English never seem to express comparative (“as if”, “as”, “like”) or substitutive relations (“instead of”), unless they are combined with the relevant connectives (cf. Kortmann 1991: 132–141). In Hindi-Urdu, by contrast, substitutive relations can be signalled by the converbal affix *-kar*:

- (26) Hindi-Urdu (Kachru 1981: 39)
mohan khaana na khaa-kar TV dekhne lagaa.
 Mohan meal not eat-CONV TV see began
 ‘Mohan began to watch TV instead of eating.’

Languages with contextual converbs like English, Italian, Spanish or Russian do not allow chaining of such converbs in narratives. If several converbs are combined, as in the following example, they typically do not express a sequence of events, but a multitude of simultaneous, unordered events:

- (27) *Now, in the Senior Common Room, they hurried forward and clustered around Morris's chair, smiling and chattering, pressing upon him cups of tea and chocolate cookies, asking him about his journey, his health, his work in progress, offering him belated advice about accommodation ...* (Lodge 1975: 89)

Swedish and German, like most Germanic languages other than English, make only parsimonious use of converbs. In these languages, converbal constructions can never express purely sequential relations, but only circumstantial relations. Thus, only the second of the two following examples from English has a non-finite (participial) counterpart in Swedish (cf. Tikkanen 1987: 409–412). In the German translations, no converb would be used in either case:

- (28) a. *The headmaster resigned in September, dying before the end of the year.*
 b. *The headmaster resigned in September, wishing to devote all his time to his book.*
- (29) Swedish
 a. *Rektorn avgick i september och dog före årets slut.*
 rector:the left in September and died before year:the's end
 b. *Rektorn avgick i september, önskande ägna sig helt åt*
 rector:the left in September wishing devote self wholly to
sin bok.
 his book

In German "attendant circumstance" seems to be the most common interpretation of converb constructions, which are subject to severe grammatical constraints. Auxiliary verbs cannot be combined with the converbal affix *-end* at all and converbal clauses quickly become unacceptable beyond a certain level of complexity:

- (30) *Hans kam (? ein Lied) pfeifend in die Küche.*
 Hans came a song whistling into the kitchen
 'Hans came into the kitchen, whistling (a tune).'

5. Factors contributing to utterance meaning

As has been shown in the preceding two sections, converbal constructions of the contextual type are vague and unspecific in their meaning. This basic meaning corresponds very closely to that expressed by the coordinating conjunction *and* in some cases, namely in the cases called "factual" above, but even such a paraphrase would be too specific in other cases. It seems therefore best to think of this basic meaning as a variable or template which is filled in and enriched by a wide variety of factors pertaining to the surrounding linguistic environment and the situational context.⁸ To show which factors are involved and how they interact in specific instances is the topic of the following section.

5.1. Grammatical properties

Among the grammatical properties of the containing sentence, it is primarily constituent order and intonation (location of focus, division into tone groups) that play a role, even if this role differs somewhat from language to language. Since problems of focusing and scope will be dealt with in section 6, only constituent order will be discussed here.

Constituent order can, of course, only play a role in the interpretation of converb constructions if the position of the clause containing the converb is not fixed. In Hindi-Urdu clauses containing a verb with the converb affix *-kar* always precede the main clause and this fact excludes a possible relevance of constituent order for the interpretation of converbs. In English, by contrast, clauses with converbs can either precede or follow the main clause and constituent order may thus play a role. Kortmann (1991: 117) observes that more than 80 percent of converb constructions manifest iconic constituent order, i. e., the order of constituents reflects the order of events. Iconic word order is nearly always found whenever the converb construction has a purely sequential interpretation, i. e., functions like a narrative converb:

- (31) a. *She took off her coat and scarf, dumping them on the bed.*
 b. *He listened at the door of the office, hearing nothing.*

But in those cases like (31), where the order of events can be reconstructed on the basis of world knowledge, a noniconic constituent order may have the same interpretation as an iconic one:⁹

- (32) a. *Hilary shouted his name, counting the number of echoes.*
 b. *Counting the number of echoes, Hilary shouted his name.* (Stump 1985: 321)

Only in those cases where the order of events is not in any way given as a result of world knowledge does constituent order seem to be a crucial factor (cf. Kortmann 1991: 152):

- (33) a. *She uncurled her legs, reaching for her shoes.*
 b. *Reluctantly Marsha stopped, looking down at the girl who had opened her eyes.*

In French, constituent order is, according to Halmøy (1982: 248–249; 264–265), even less important for the interpretation of converbs. Halmøy points out that minimal pairs like (34 a–b) do not differ in their interpretation and that both the order in (35 a) and the one in (35 b) are perfectly acceptable:

- (34) a. *Il a rougi en la voyant.*
 he has blushed CONV her see:CONV
 ‘He blushed seeing her.’
 b. *En la voyant il a rougi.*
 CONV her see:CONV he has blushed
- (35) a. *En postant cette lettre ce soir, elle arrivera*
 CONV mail:CONV this letter this evening it will:arrive
 demain.
 tomorrow
 ‘Mailing this letter this evening, it will arrive tomorrow.’

- b. *La lettre arrivera demain en la postant ce*
 the letter will:arrive tomorrow CONV it mail:CONV this
soir.
 evening

In Russian, constituent order seems to have the greatest significance of the four languages mentioned so far. Boguslavskij (1977: 276–277) points out that the unmarked position for a converb with a temporal interpretation is to the left of a main clause, whereas a converb with a “manner” or “instrumental” interpretation is to the right of the main clause. Minimal pairs like the following clearly differ in their interpretation along these lines:

- (36) a. *Volnujas' on xodit po komnate.*
 be.nervous:CONV he walks around room
 ‘When he is nervous he walks up and down the room.’
 b. *On xodit po komnate volnujas'.*
 he walks around room be.nervous:CONV
 ‘He restlessly walks/is walking up and down the room.’

Such minimal pairs do not provide clear evidence, however, that constituent order is the decisive factor because they also differ with respect to intonation. The adverbial participle *volnujas'* forms a separate tone group in (36 a) and is thus an instance of a detached participle, whereas this converb is nondetached in (36 b). Moreover, the participle is focused in the latter example, as manner adverbials usually are. Overall, language-specific principles of constituent order do not seem to play a crucial or even important role for the interpretation of converbs. What does play a role is a general principle of iconicity: the left-to-right sequence of converbal clause and main clause typically reflects the order of events. Many analyses which distinguish specialized converbs of anteriority and of posteriority for specific languages have to admit somewhat reluctantly that the alleged converbs of anteriority may also describe a posterior situation if they follow the main clause. Igor' Nedjalkov's discussion (this volume) of his examples (10) and (11) in Evenki as well as (10') and (11') in Russian are cases in point.

5.2. Semantic factors

5.2.1. *Syndesis*

If converbs are combined with certain connective devices like conjunctions, conjunctive adverbs (conjuncts), etc., the semantic relation between converbal phrase and main clause is more or less fully specified. As a result, the asyndetic linking normally expressed by bare converbs is changed into a syndetic one (cf.

Lehmann 1988: 210–213; König–van der Auwera 1990: 342–344). Among these connectives several subclasses can be distinguished: conjunctions (e.g., English *while, when, as if*); conjunctive adverbs (English *nevertheless, instead, therefore*); focus particles (English *even*); case suffixes (as in Finnish); but not all of the relevant expressions fit nicely into any of these four groups.

In English, converbial clauses without a subject of their own may be combined with conjunctions like *when, while, before, after, before, as if/though, rather than, since* and the addition of such a conjunction invariably results in a fully specific interpretation:

- (37) a. *Before coming to the pub, John had taken a solitary evening stroll through the village.*
 b. *Mary looked into her glass, as if replaying the scene there.*

Some interpretations (e.g., comparative: *as if*; preferential: *rather than*) are only possible as a result of such augmentations of converbs—and this does not only apply to English—in other cases the relevant interpretation does not crucially depend on the presence of the conjunction. Russian is another example of a language where converbial clauses can be introduced by conjunctions (*kak budto* ‘as though’, *slovno* ‘as, as if’). Other Slavic languages, by contrast, do not allow this (Růžička 1978: 237; Rappaport 1984: 185). French and Italian also allow converbial clauses to be introduced by conjunctions, but this seems to be a marginal phenomenon in both languages. Halmøy (1982: 165–171) lists *dès* and *comme* for French and Pusch gives *pur* ‘although’ and *come* ‘as if’ as examples for Italian.

- (38) Italian (Pusch 1980: 38)
Vagava, nella casa, come cercando il sentiero misterioso ...
 wandered in:the house as.if look:CONV the path mysterious
 ‘He wandered around the house, as if looking for the mysterious path ...’

Absolute constructions in English can be augmented by *with, without, what with* as well as, marginally, by *and*, but given the less specific meaning of these connectives it does not come as a surprise that their contribution to the interpretation of the relevant utterance cannot easily be delimited from that of other factors (Kortmann, this volume). The fact that converbs may be combined with a variety of semantically very different conjunctions is further evidence for the claim that converbs themselves are vague and nonspecific in their meaning.

An equally specific contribution to the meaning of converbial constructions is made by conjunctive adverbs—also called “connective adverbs” or “conjuncts”—in the main clause. In these cases, too, the semantic link between

main clause and converbal clause is made fully explicit. Examples of such conjunctive adverbs in English are *meanwhile, then, therefore, thus, instead, nevertheless, thereby, still, anyway*, etc.:

- (39) a. *He refused to stay in his office, going to the library instead.*
 b. *Being very uncomfortable, he still fell asleep.* (Stump 1985: 321)

In contrast to the rare phenomenon of combining converbs with conjunctions, the explication of the semantic relation between converbal clause and main clause seems to be a frequent phenomenon across the languages with converbs (cf. Boguslavskij 1977: 227 for Russian).

A second group of adverbs that may contribute to the interpretation of converbal constructions are focus particles like English *even*, French *même, voire, surtout, juste, rien que* or Italian *anche, solo*. Expressions of this type operate semantically on a structured proposition, i. e., on a proposition analyzed into a focused part and a backgrounded part, the scope of the particle. If a scalar focus particle like English *even*, French *même* or Hindi *bhii* takes a converbal phrase as focus and the whole complex sentence as scope (background), the result is either a concessive conditional (40 a) or a concessive interpretation (40 b), depending on the factuality of the main clause:

- (40) French (Halmøy 1982: 160)
- a. *Il est impossible de rien distinguer, même en*
 it is impossible to anything distinguish even CONV
avançant les yeux le plus possible.
 advance:CONV the eyes the more possible
 'It is impossible to see anything clearly, even if one bends forward as much as possible.'
- b. *Même en n' y faisant pas attention, il se disait*
 even CONV NEG to.it make:CONV NEG attention he self said
 "tiens".
 PT
 'Even though he did not pay attention to it, he said to himself "Wait a minute".'

If a particle like *even* or *même* does not interact with a converbal construction in this fashion, it determines neither of these two interpretations:

- (40) c. *He'd held onto this fictional Elena all the way into the sitting room of Anthony Weaver's house, even going so far as to scan the guests ...* (George 1992: 317)

Other focus particles do not seem to have an equally clear affinity to a specific interpretation as the scalar inclusive particle *even*. The examples listed by Halmøy (1982: 162–171) with restrictive particles like *seulement*, *ne ... que*, *rien que* ‘only’, all have in instrumental interpretation and thus suggest that there is a tendency to interpret converbial clauses acting as foci of restrictive particles as instrumental adverbial clauses:

- (41) French (Halmøy 1982: 163)
Je ne pouvais plus me sauver qu’ en renversant la
 I NEG could more myself save than CONV reverse:CONV the
situation.
 situation
 ‘I could not save myself any more except by reversing the situation.’

But it is not clear how much of this interpretation depends on an interaction with the original connective *en*, which has been grammaticalized as part of the *gérondif*,¹⁰ and, moreover, the presence of a restrictive particle does not seem to be a sufficient condition for an instrumental interpretation.

Among the semantically highly relevant constituents of a converbial construction we can also count the case affixes of the *lauseenvastike* (sentence equivalents) in Finnish. In this language, different infinitival stems, combined with case affixes and also (optionally) with possessive affixes, may function as heads of phrases or clauses that correspond to finite adverbial clauses in the same and in other languages. The following example has a purposive interpretation as a result of combining the first infinitive stem of the verb *ostaa* ‘buy’ with the translative case affix *-ksi*¹¹ and the possessive affix *-en*:

- (42) Finnish (Fromm 1982: 198)
Hän otti lainan ostaa-ksi-en.
 He take out-PAST mortgage-ACC buy-TRANSL-POSS.
 asunno-n
 3SG apartment-ACC
 ‘He took out a mortgage to buy an apartment.’

5.2.2. Tense, aspect, mood and modality

Temporal, aspectual and modal properties of the main clause play an important role in differentiating conditional interpretations from factual ones, i.e., from causal, concessive, temporal ones, etc. According to Stump (1985), a converbial construction can have a conditional interpretation in English if the main clause meets one of the following three conditions: (i) it contains a modal auxiliary; (ii) it contains an adverb of (relative) frequency like *often*, *sometimes*, *always*; (iii) it has a generic or habitual interpretation:

- (43) a. *Wearing that new outfit, John would fool everybody.*
 b. *Lying on the beach, John sometimes smokes cigars.*
 c. *Lying on the beach, John smokes cigars.*

The reason for this regularity is seen in the fact that both modal auxiliaries and adverbs of frequency are to be analyzed as binary operators specifying some logical relation between the sentence they modify and a set of propositions which includes the conversational background, but may also include the proposition expressed by a conditional antecedent or a free adjunct. The relevant semantic property of adverbs of frequency is more clearly visible in the following paraphrase of (43 b):

- (43') b. *Some events of John lying on the beach are events of John smoking cigars.*

The use of an analogous explanation for generic sentences like (43 c), i. e., the assumption that such sentences contain an abstract (covert) binary, "generic operator", is a less convincing aspect of Stump's analysis. Genericness is, after all, an interpretative effect of utterance types arising from an interaction of a wide variety of factors and therefore cannot be linked in any way to one grammatical and/or lexical aspect of an utterance.

But quite apart from these suggestions concerning generic sentences, Stump's analysis has to be drastically extended and revised as soon as languages other than English are taken into account. The following examples show that a wide variety of tenses and moods permit a conditional interpretation of the *gérondif* in French: the present tense, with and without a modal verb (44 a–b), the future (44 c), the pluperfect subjunctive (44 d) and the present and past *conditionnel* (44 e–f):

- (44) French (Halmøy 1982: 225–240)

- a. *J' attire en me vengeance sa haine et sa*
 I attract CONV myself revenge:CONV his hatred and his
colère; j' attire ses mépris en ne me
 contempt I attract his contempt CONV NEG myself
vengeant pas.
 revenge:CONV NEG
 'If I take revenge, I will arouse his hate and wrath; if I don't take
 revenge, I will earn his contempt.'
- b. *En partant de bonne heure, nous pouvons être rentrés dans*
 CONV leave:CONV of good hour we can be returned in
la nuit.
 the night
 'If we leave early, we can be back at night.'

- c. *En la mettant à la poste ce soir, il arrivera*
 CONV it put:CONV to the mail this evening it will:arrive
demain à la première heure.
 tomorrow at the first hour
 'If it is mailed this evening, it will arrive first thing tomorrow morning.'
- d. *En répondant au petit-fils, il fut tombé sur le*
 CONV answer:CONV to:the grandson he had fallen on the
grand-père.
 grandfather
 'By answering the grandson he would have attacked the grandfather.'
- e. *En revenant, il l'aurait réveillée.*
 CONV go.back:CONV he her would:have woken.up
 'Going back he would have woken her up.'
- f. *En mangeant moins, vous vous porteriez mieux.*
 CONV eat:CONV less you you would:carry better
 'If you ate less, you would feel better.'

On the other hand, the use of the *conditionnel* does not necessarily lead to a conditional interpretation (cf. Halmøy 1982: 227). In Russian, to give an example of yet another tense-aspect system, it is the nonpast tense of a perfective verb that permits a conditional interpretation:

(45) Russian (Boguslavskij 1977: 271)

- a. *Raz"ezžaja po strane, on navel spravki o*
 travel:IMPF.CONV around country he made inquiries about
syne.
 son
 'Travelling around the country, he made inquiries about his son.'
- b. *Raz"ezžaja po strane, on navedet spravki o*
 travel:IMPF.CONV around country he will.make inquiries about
syne.
 son
 'Travelling around the country, he will make inquiries about his son.'

A possible generalization which covers all these cases is simply the statement that a necessary, albeit not sufficient, condition for the conditional interpretation of a converbal construction is that the main clause should have a nonfactual (hypothetical, futurate, generic) interpretation. This generalization also includes the relevant examples with modal auxiliaries in English and modal verbs in other languages:

- (46) Spanish (Reese 1991: 139)
Apadrinando a un niño del Tercer Mundo Vd. puede
 support:CONV ACC a child of:the Third World you can
operar un cambio inimaginable para él/ella ...
 bring:about a change unimaginable for him/her
 'If you support a child from a Third World country you can bring
 about an unimaginable change for him/her ...'

Note, however, that even in English there are cases where the mere presence of a modal auxiliary does not license a conditional interpretation, even if other relevant conditions concerning the predicate with the converbal form are met:

- (47) (*They said very little during the drive.*) *Waiting at the red lights, he could look at her.* (Harris 1981: 235)

5.2.3. *Aktionsart*

In addition to the conditions discussed above, Stump (1985) identifies another necessary condition for the conditional interpretation of converbs in English: the predicate in the converbal clause has to be a member of a class called stage-level predicates as opposed to individual-level predicates by Carlson (1980). It is due to this contrast that the first of the following two examples has a conditional interpretation, whereas the second receives a causal reading:

- (48) a. *Wearing his new outfit, John would fool anyone.*
 b. *Being a master of disguise, John would fool anyone.*

Stage-level predicates denote spatiotemporal manifestations of individuals, or transitory properties (*eat a sandwich, wear an outfit*), whereas individual-level predicates express more inherent, essential, permanent properties (*be tall, weigh a lot*). Free adjuncts derived from the former are called "weak adjuncts" by Stump, in contrast to the "strong adjuncts" derived from the latter. Strong adjuncts can only get a factual (causal, temporal, attendant circumstance, etc.) interpretation in English. Whether such a correlation between types of predicates and possible interpretations can also be found in languages other than English is unclear, since the question has not been raised in the relevant literature after Stump (1985).

The *Aktionsart*, character or type of predicate also plays a role for some other semantic contrasts. Verbs denoting states rather than events or processes, i.e., verbs of inert cognition (*know, hate, believe*, etc.) or relational verbs (*be, own, owe, have, deserve*, etc.) are generally not compatible with a temporal interpretation since they are incapable of identifying a time interval or point-in-time. Converb forms of such verbs typically have a causal or a concessive interpretation:

- (49) a. *He paused, feeling unaccountably put off by what he saw.*
 b. *Knowing he had no time to go home, he decided to do without lunch.*
 c. *So, in the end, despising herself ..., she settled upon saying ...* (George 1992: 281)
 d. *Being a chihuahua, Fido was harmless.*

This restriction, however, does not apply to verbs of inert perception (*see, hear, taste, perceive*), which are also often included among the stative verbs. Converbs formed from such verbs frequently have a temporal interpretation:

- (50) a. *Hearing the noise, she went outside.*
 b. *Seeing him, she tooted the horn once.*

There is one interpretation of converbial clauses that depends completely on the meaning of the verbal head, viz. the purposive interpretation. Thus, Reese (1991: 227) notes, for instance, that the *gerundio* in Spanish has this interpretation in combination with verbs like *tratar de* 'try' and *intentar* 'intend' and the examples given for this interpretation in English employ verbs like *avoid, try, seek, look for* (cf. Kortmann 1991: 126):

- (51) Spanish (Reese 1991: 227)
Tratando de atender a todos, don Roque servía a varias
 try:CONV to please ACC all Don Roque served to various
mesas al mismo tiempo.
 tables at:the same time
 'Trying to please everyone, Don Roque served several tables simultaneously.'
- (52) *He walked away from her, buying time, seeking calm, trying to think what to do.* (George 1991: 60)

But as pointed out by Rappaport (1984: 185) in connection with analogous Russian examples, to speak of purposive interpretations for converbs in such cases is highly problematic. Purposive clauses are not factual, i.e., they are not entailed by the relevant complex sentence, whereas the converbial clauses in (51) and (52) clearly are factual. The purposive interpretation is really a consequence of the verb meaning itself, rather than of the converbial form in such cases. In contrast to these European languages, Evenki has genuine specialized converbs (*-da, -vuna*) to express purposive relations (I. Nedjalkov, this volume).

Another semantic property of the converbial form that should also briefly be mentioned in this context is negation. Converbial clauses introduced by a negation may have a variety of interpretations such as causal, concessive and instrumental (interpretative) ones:

- (53) a. *He nodded merely, not trusting his voice.*
 b. *Not introducing her to any of his colleagues, George offended Sheila in a way she had never thought possible.* (Kortmann 1991: 175)

In contrast to these interpretations, an interpretation as “absence of expected attendant circumstance” (i. e., “without”) crucially depends on the presence of an overt negation:¹²

- (54) a. *He smiled, making no comment.*
 b. *She listened in silence, asking no questions and making no comments ...* (George 1991: 260)

Finally, a few remarks on the role of the verb in the main clause in the interpretation of converbal constructions. In some languages there are constraints on the combination of converbs with certain types of predicates as well as on the interpretation of certain combinations. In French, for example, the *gérondif* cannot be combined with stative predicates, unless it receives a temporal interpretation or is linked to the main clause as a speech act qualifier:

- (55) French (Halmøy 1982: 311–315)
 a. *En attendant, la maison est vide.*
 CONV wait:CONV the house is empty
 ‘Meanwhile, the house is empty.’
 b. *En sortant de chez lui, vers huit heures du*
 CONV leave:CONV from at him around eight o’clock of:the
matin, Maigret avait le choix entre trois démarches.
 morning Maigret had the choice between three steps
 ‘Leaving his home at around eight in the morning, Maigret had the choice between three steps (that could be taken).’

In English, there are no restrictions of this kind, but the predicate of the main clause does often play a role in the interpretation of converbs. As already mentioned, an instrumental (interpretative, consequential) interpretation requires that the verb in the main clause denote an activity without inherent specification of a method.

5.3. Pragmatic factors (world knowledge, etc.)

At various points in the preceding discussion it has already been shown that world knowledge, i. e., general background assumptions and contextual information, as well as general principles of language use make an important contribution to an interpretative enrichment of the nonspecific basic meaning of con-

verbs. So, all I need to do in this section is to summarize the main points and to add a few more observations.

Knowledge of whether converbal clause and main clause relate to one and the same situation or to two different situations was shown to be relevant for instrumental (interpretative), consequential and modal interpretations ("manner"). The following example describes two aspects of one "event" and is an instance of an instrumental or consequential interpretation:

- (56) a. *Lynley had crossed an undefined boundary, altering their relationship in ways neither of them could have possibly foreseen.* (George 1992: 61)

An interpretation as "elaboration" is based on the same type of world knowledge:

- (56) b. *He was off here and there all the time, tracking down a lead, doing research, interviewing this person, locating that one ...*

World knowledge concerning the normal sequence of events may overrule the default assumption that the constituent order in converbal constructions is iconic (cf. Stump 1985: 322):

- (57) *Gaining full ownership of the company only after several years, John paid enormous sums to one stockholder after another.*

Instrumental, causal and concessive interpretations are based on background assumptions about possible and normal connections between events and states. In the case of instrumental and causal interpretations the two events or states are in harmony with these general connections, in the case of concessives they are not:

- (58) a. *I was calm now, knowing what I had to do.*
 b. *He wanted very much to go home, knowing that he would not, could not until the dragon was dead.* (Harris 1981: 232)

An example like the following may thus have either a causal or a concessive interpretation, depending on what kind of general connection is assumed to hold between the relevant situations (cf. Kortmann 1991: 184):

- (59) *Not having seen the picture, Tom bought it.*

An adversative interpretation (i. e., "but") as well as an interpretation as "absence of expected attendant circumstance" also depend on knowledge about what normally goes together, as is shown by the contrast between (53) and (54). Finally, a temporal interpretation—as opposed to "attendant circumstance"—is much more likely if an activity is conventionally associated with a certain time.

Halmøy (1982: 286) notes that (60 a) is much more likely to have a temporal interpretation than (60 b):

- (60) a. *Je chante en me rasant.*
 I sing CONV myself shave:CONV
 'I sing (while) shaving.'
 b. *Je me rase en chantant.*
 I myself shave CONV sing:CONV
 'I shave singing.'

Of course, such minimal pairs are usually also distinguished through the location of the sentential stress (nuclear tone): in both cases the stress would normally be on *chanter*. A temporal interpretation for (60 b) would be associated with a stress on *rase*, but would also require an elaborate context such as the following:

- (61) I am a professional singer and practice all day. I do all kinds of things while I practice. I even *shave* singing.

In conclusion, a further point already made above should be repeated: In accordance with the pragmatic principle to go for the most informative interpretation ("relevance"), a basic temporal interpretation is frequently enriched to a more specific, e.g., causal or concessive, one.

6. Focusability and Scope

Problems of focus and scope are only given sporadic attention in in-depth studies on converbs in English, French, Italian, Spanish or other European languages. Notable exceptions are studies on the *deepričastija* in Russian, where a systematic distinction is generally drawn between "detached" and "non-detached" converbs on the basis of phonological criteria and where this contrast is shown to correlate with a variety of syntactic and semantic differences (cf. Rappaport 1984). Under which conditions can converbs be focused? Can they be the only focus of a complex sentence? How do converbs interact with other scope-bearing expressions within a sentence? These are some examples of questions that have to be addressed in this section and since there is a good deal of confusion to be found in the use of such basic concepts as "focus", "background" and "scope", I will begin with a brief discussion of these distinctions.¹³

Even though the term *focus* also has some significance for the syntactic organization of a sentence, it is easiest to define the term on the basis of phonological and/or semantic criteria. The focus of an utterance – or the foci, if there are more than one – is that part that is highlighted and foregrounded. Phonologi-

cally, this foregrounding is typically, though not always signalled by the placement of the nuclear tone (sentence stress). The focused part contains the nuclear tone, but may of course be more than the syllable actually marked by prosodic prominence. The exact extension of the focus is often assumed to be reconstructable on the basis of syntactic principles. The semantic effect of focusing consists in relating the value of the focused constituent to alternative values of the same type which are under consideration in a certain context. The following simple example provides illustration of these points.

- (62) John *stole the money*.

Here the subject is focused and the semantic effect is to oppose John to other possible thieves. The so-called “contrastive stress” found in (62) is, of course, only one possible manifestation of focusing. The complementary term for *focus* is *scope*. Every constituent other than a focused part functions as background relative to a focus within a certain domain. In (62) the verb phrase *stole the money* is backgrounded in this sense. There may, however, be more than one focus within a sentence, and a constituent can be focused relative to different domains or backgrounds. In the following examples *nothing at all* is focused relative to two different backgrounds, indicated by vertical strokes, and these two kinds of phonological and syntactic organisation clearly have semantic effects. Only (63 a) would be suitable as a remark in order to thank an invited speaker:

- (63) a. /You would have been welcome if you had said nothing at all/
 b. /You would have been welcome /if you had said nothing at all/

For the characterization of the background relative to a certain focus, intonation plays again an important role. In cases like (63 a–b), the background relative to a focus is coextensive with the tone group containing the focus. The boundary between two tone groups is indicated by a pause or break, which in writing is often represented by a comma.

There is a wide variety of expressions such as focus particles, negation, sentence adverbs (*probably, possibly*), certain predicates, etc., which interact with the focus-background structure of the sentence they combine with. The best-known case is that of the so-called focus particles like *even, only, merely, also, especially*, etc. The contribution these expressions make to the meaning of a sentence varies with the focus-background structure they operate on, as is shown by the following examples:

- (64) a. *Even* John bought a book on linguistics.
 b. John *even* bought a book on linguistics.
 c. John *even* bought a book on linguistics.

Given this interaction, the focus of such sentences can be regarded as the focus of the adverb or particle and the background relative to which a constituent is focused as the scope of the particle. Generalizing from such cases, it is sometimes assumed (cf. Jacobs, 1983) that every focus is the focus of some operator and that in addition to such overt operators as focus particles, sentence adverbs, focusing negation (*not ... but*) or structural operations like clefting, we also have to postulate covert operators like interrogative, imperative and declarative mood, i. e., operators that are structurally encoded. On the basis of these distinctions we are now in a position to characterize some further properties of converbal constructions that are also highly relevant for their interpretation.

As already mentioned above, the distinction between detached and nondetached converbs, a distinction primarily based on the integration and focusability of a converbal clause within the whole complex sentence, has a long tradition in Russian linguistics. First introduced in 1928 by Peškovskij, this contrast is discussed in great detail in Rappaport (1984). Nondetached adverbial participles form one tone group with the main clause and are thus fully integrated into the complex sentence. Detached participles, by contrast, form a tone group of their own and always have their own focus. Their prosodic separation from the main clause is generally indicated in writing by a comma. The following two sentences illustrate this contrast:

- (65) Russian (Rappaport 1984: 119–120)
- a. /*Alik xodit po ulice spotykas'*/
 Alik walks along street stumble:IMPF.CONV
 'Alik is walking along the street stumbling.'
 - b. /*Vitja stoit v koridore/ robeja*/
 Vitja stands in corridor feel.timid:IMPF.CONV
 'Vitja is standing in the corridor, feeling timid.'

In (65a) the converb is the focus of the sentence relative to the complete rest of the sentence, its background. In (65b) the detached converb forms a tone group of its own, as does the main clause, each with its own focus. The converb in (65b) is not integrated into the complex sentence and to a certain extent autonomous within the larger construction. Detached and nondetached converbs in Russian differ systematically in a variety of syntactic and semantic properties. First of all, they differ in the control properties: Only nondetached converbs require that their understood subject must be an argument of the main clause. A certain autonomy of the detached converbs is also manifested in a lack of constraints on the interpretation of the temporal relations between main clause and converbal clause. Nondetached converbs always express simultaneity,

whereas detached ones may indicate any of the three possible temporal relations (simultaneity, anteriority, posteriority):

(66) Russian (Rappaport 1984: 95)

- a. *Ja sklonen doverjat' ètomu čeloveku znaja ego v*
 I inclined trust that person know:IMPF.CONV him in
molodosti.
 youth
 'I am inclined to trust that person, having known him as a youth.'
- b. *Ja sklonen doverjat' ètomu čeloveku daže ne znaja ego.*
 I inclined trust that person even not know:IMPF.CONV him
 'I am inclined to trust that person without even knowing him.'

In contrast to detached converbs, predicates may require nondetached ones:

(67) Russian (Rappaport 1984: 129)

- On provel prazdniki *(kupajas' i žagoraja).*
 he spent holidays bathe:IMPF.CONV and suntan:IMPF.CONV
 'He spent the holidays (bathing and suntanning).'

Moreover, the ranges of possible interpretations differ for these two types of converbs: Detached adverbial participles are compatible with all kinds of adverbial interpretations except "posterior consequence" (purpose, conditional consequent, etc.) and are therefore characterized by Rappaport as propositions expressing the "background" to some event.¹⁴ Nondetached converbs, by contrast, exclude anterior and posterior temporal relations and typically express manner or attendant circumstances. Rappaport characterizes them as expressing a proposition which accompanies the event expressed in the main clause. Finally, nondetached adverbial participles exhibit the properties relevant for this study as a consequence of being integrated into the main clause: they can be the focus of the whole construction (cf. [65a]); they are part of the background if some constituent of the main clause is focused; and they can be in the scope of an operator (focus particle, sentence adverb, interrogation, negation) in the main clause:

(68) Russian (Rappaport 1984: 113–116)

- a. *Neverno, čto on ubil zaščiščas'.*
 untrue that he killed defend.self:IMPF.CONV
 'It is not true that he killed *defending himself*.'
- b. *Alik daže idet po ulice spotykas'.*
 Alik even walks along street stumble:IMPF.CONV
 'Alik is even stumbling along the street.'

Although these questions have never been discussed in detail for English, French or Italian, it is clear that the distinction between detached and non-detached converbs can also be drawn for these languages. In examples like the following, the *gérondif* is either the only focus of the sentence or part of the background of a focus in the main clause and thus clearly non-detached:

- (69) French (Halmøy 1982: 267)
- a. *C' est en travaillant qu' il réussira.*
it is CONV work:CONV that he will:succeed
'It is by working that he will succeed.'
 - b. *C' est en la voyant qu' il a rougi.*
it is CONV her see:CONV that he has blushed
'It was when he saw her that he blushed.'
- (70) a. *Peut-on fumer en priant?*
can-one smoke CONV pray:CONV
'Is it allowed to smoke while praying?'
- b. *Peut-on prier en fumant?*¹⁵
can-one pray CONV smoke:CONV
'Is it allowed to pray while smoking?'

Similarly, there are clear cases of nondetached converbs in English, even though the vast majority of examples discussed in studies like Kortmann (1991; this volume) seem to be of the detached variety:

- (71) a. */Freddy earned his money turning them out/ and the stories sold a lot of Tattlers.* (Harris, *Red Dragon*, p. 148)
- b. */You are better off not listening to his advice/*
 - c. *I shave singing.*
 - d. *I sing shaving.*

There is, however, a clear difference between Russian and French, on the one hand, and English, on the other, as is shown by the English translations of the examples in (66) to (70). There are obviously heavier restrictions on the integration of converbs into a main clause, i. e., on the formation of nondetached converbs in English. And it is precisely at this point that various connectives play an important role in English. The English translations of the French examples in (70) are much better with *while* than without such a conjunction. Kortmann (1991: 182) notes that *without* as opposed to a participial construction introduced by *not* guarantees closer integration of the converb into a sentence, thus enabling the converb to be in the scope of operators in the main clause:

- (72) a. *Tom bought the painting, not having seen it.*
 b. *Tom bought the painting without having seen it.*
- (73) a. *Did Tim buy the painting without having seen it?*
 b. **Did Tom buy the painting, not having seen it?*

Note also that a connective like *with* is essential in cases where a focus particle like *even* selects the whole converbial clause as focus and takes the whole complex sentence as scope:

- (74) *Even with Scottish unemployment standing at 190,000, 36 percent of the electorate think that Labour are best equipped to deal with the problem.* (*New Statesman*, June 1978, p. 813)

Without *with* the focus and scope of *even* would not be clearly identifiable. In addition to expressing overtly various meanings otherwise not expressible by bare converbial constructions in English, conjunctions and other connectives thus also play an important role insofar as they bring about the full integration of a converbial clause into the main clause. Such integration is essential if an operator of the main clause is to select a converb as focus and/or include it in its scope, as in (73 a) or the following example:

- (75) *... and we cannot check it [i.e., the river] or turn it, /but can only drink from it while living/* (Stewart 1970: 452)

The phenomena mentioned in Tikkanen (1987; this volume) for Japanese, Burushaski, Tamil and other languages with narrative converbs are not just a matter of scope. In the following examples from Japanese, an operator of the main clause does not only take wide scope over a preceding converb, but may also assign mood or polarity to this converbial clause:

- (76) Japanese (Kuno 1986: 412–413)
- a. *uwagi o nui-de hangaa ni kake nasai!*
 jacket ACC strip-CONV hanger on hang IMP
 'Take off your jacket and hang it on the hanger!'
 or
 'Having taken off your jacket, hang it on the hanger.'
- b. *John wa uwagi o nui-de hangaa ni kakemashita ka?*
 John TOP jacket ACC hang-CONV hanger on hang-PAST-Q
 'Did John take off his jacket and hang it on a hanger?'
 or
 'After taking off his jacket, did John hang it on a hanger?'

The same phenomenon is reported for Lezgian by Haspelmath (this volume). In the following English example, by contrast, the converb is also in the scope of the interrogative operator of the main clause, but this operator is not copied into the converbal clause:

(77) /*Did you blush looking at her?*/

The phenomenon of copying the semantic properties of an operator into a converbal clause in its scope seems to correlate with two other properties of a language, viz. SOV order and the availability of narrative converbs.

Abbreviations

ACC	accusative	POSS	possessive
CONV	converbs	Q	question marker
IMP	imperative	SG	singular
INF	infinitive	TOP	topic
PAST	past tense	TRANSL	translative

Notes

1. In assigning Russian converbs to the contextual type, I am, of course, not overlooking the important contribution made by aspect to the overall interpretation. Converbs in *-a* combine both with imperfective and with perfective verbs (*idja* vs. *pridja*). The former are generally regarded as having a basic meaning of “simultaneity”, whereas the perfective forms can be analyzed as expressing “anterior” or “nonposterior” relation. I am indebted to B. Comrie, M. Haspelmath and I. Nedjalkov for helpful criticism and comments.
2. I hasten to add that it is by no means clear whether V. Nedjalkov supports the vagueness view. According to Apresjan, even contextual converbs are basically polysemous, so that the role of the context is not one of modulation but one of disambiguation or selection.
3. By showing that *-kar* in Hindi may express both sequential (perfective) and simultaneous temporal relations, Kachru (1981) has in fact made a contribution to the vagueness view.
4. This applies mainly to cases of lexical polysemy. But as Igor’ Nedjalkov has pointed out to me there are clear and frequent parallels across languages as far as “grammatical polysemy” is concerned. The use of a reflexive marker for “reflexive”, “reciprocal”, “passive” interpretations as well as for constructions with missing arguments is a clear case in point. In such cases there clearly seems to be a common denominator, however, roughly describable as “nondistinctness of arguments” and thus I would hesitate to simply speak of polysemy in such cases.
5. The same point, though not the same conclusion, is offered by Pusch (1980: 28–29) in connection with German *als* ‘as’.

6. In the analysis of converbal meaning – as for the analysis of interclausal relations in texts – additional labels are frequently used that are not employed in the semantic description of prepositions and conjunctions, like “elaboration”, “specification”, “addition”.
7. Cf. König (1991 b) for a detailed discussion on the relationship between causal and concessive constructions.
8. Cf. Stump (1985) for some detailed suggestions as to how this basic meaning can be analyzed for free adjuncts and absolute constructions in English.
9. After pointing out the importance of constituent order in connection with the examples (32 a–b), Stump (1985: 348) admits in a footnote that (32 b) is compatible with the interpretation that the shouting preceded the counting.
10. The fact that the *gérondif* in French is more limited in its range of possible interpretation could well be connected with the fact that the original connective has been grammaticalized as an obligatory part of converbal constructions.
11. The translative in Finnish generally expresses a state, property, function or position into which something or someone enters or the end point of a movement or change (cf. Karlsson, 1983: 112).
12. “Absence of expected attendant circumstance”, the usual interpretation of *without* is best regarded as a variety of “attendant circumstance”. Such interclausal relations are somewhat similar to concessive relations, but whereas the latter are based on general connections between situations, the former seem to be based more in context-specific expectations. Note that the truth conditions of *p without q* cannot simply be defined as: “*p* & ~ *q*, expected (*p* & *q*)” (cf. Pasch, 1986), since the clause introduced by *without* may also occur in nonfactual contexts and thus receive a conditional interpretation:
 - a. *He left without saying goodbye.*
 - b. *You won't pass the exam without working a little harder.*
13. Cf. Jacobs (1983) or König (1991 a) for more detailed discussions.
14. The term “background” is thus used in at least three different senses in connection with the meaning of converbs: (i) a converbal clause can be backgrounded relative to some focus in the main clause—this is how the term is used here; (ii) all converbs are sometimes analyzed as indicating backgrounding as opposed to the foregrounding invariably indicated by the finite forms in the main clause—such a statement does not make much sense in my opinion; (iii) the term “background” is used to characterize the nonspecific *Gesamtbedeutung* of detached converbs, as in Rappaport (1984).
15. These two examples are part of an anecdote told in Halmøy (1982: 286). Two young monks addressed these two questions to their superior, in order to obtain the official view on the concomitant permissibility of praying and smoking. On the basis of an affirmative answer obtained to second one, one of the two monks felt perfectly entitled to smoke while saying his rosary, whereas the other was convinced that this was absolutely forbidden.

References

- Alpatov, Vladimir M.—Vera Podlesskaya
 this volume “Converbs in Japanese”.
 Apresjan, Jurij
 1983 “O strukture značenij jazykovyx edinic” [On the structure of meanings of linguistic units], in: Teresa Dobrzynska—Elżbieta Janus (eds.), 313–339.

- Bechert, Johannes—Giuliano Bernini—Claude Buridant (eds.)
 1990 *Toward a typology of European languages*. (Empirical Approaches to Language Typology, 8.) Berlin: Mouton de Gruyter.
- Boguslavskij, Igor' M.
 1977 "O semantičeskom opisanii russkix deepričastij: neopredelennost' ili mnogoznačnost'?" [On the semantic description of Russian converbs: Vagueness or polysemy?]. *Izvestija AN SSSR, Seria literatury i jazyka* 36.3: 270–281.
- Bungarten, Theo
 1976 *Präsentische Partizipialkonstruktionen in der deutschen Gegenwartssprache*. Düsseldorf: Schwann.
- Carlson, Gregory N.
 1980 *References to kinds in English*. New York: Garland.
- Cole, Peter (ed.)
 1982 *Radical pragmatics*. New York: Academic Press.
- Cole, Peter—Jerry Morgan (eds.)
 1975 *Syntax and semantics 3: Speech acts*. New York: Academic Press.
- Davison, Alice
 1981 "Syntactic and semantic indeterminacy resolved; a mostly pragmatic analysis for the Hindi conjunctive participle", in: Peter Cole (ed.), 101–128.
- Dobrzyńska, Teresa—Elżbieta Janus (eds.)
 1983 *Tekst i zdanie: zbiór studiów* [Text and sentence: a collection of studies]. Wrocław: Wydawnictwo Polskiej Akademii Nauk.
- Foley, William A.—Robert D. Van Valin Jr.
 1984 *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- Fromm, Hans (ed.)
 1982 *Finnische Grammatik*. Heidelberg: Carl Winter.
- George, Elisabeth
 1991 *A suitable vengeance*. London: Bantan Books
 1992 *For the sake of Elena*. London: Bantan Books
- Grice, H. Paul
 1975 "Logic and conversation", in: Peter Cole—Jerry Morgan (eds.), 41–58.
- Haiman, John—Sandra A. Thompson (eds.)
 1988 *Clause combining in grammar and discourse*. Amsterdam: Benjamins.
- Harris, Thomas
 1981 *Red Dragon*. New York: Deel Publishing.
- Haspelmath, Martin
 this volume "Contextual and specialized converbs in Lezgian".
- Halmøy, Jane-Odile
 1982 *Le gérondif. Eléments pour une description syntaxique et sémantique*. (Contributions Norvégiennes aux Etudes Romanes, 6.) Trondheim: Tapir.
- Jacobs, Joachim
 1983 *Fokus und Skalen. Zur Syntax und Semantik der Gradpartikeln im Deutschen*. München: Fink.
- Johanson, Lars
 this volume "On Turkic converb clauses".
- Kachru, Yamuna
 1981 "On the syntax, semantics and pragmatics of the conjunctive participle in Hindi-Urdu", *Studies in the Linguistic Sciences* 11 (2): 35–47.

- Karlsson, Fred
1983 *Finnish Grammar*. Helsinki: Werner Söderström.
- König, Ekkehard
1991a *The meaning of focus particles: A comparative perspective*. London: Routledge.
1991b "Concessive relations as the dual of causal relations"; in: Dietmar Zaefferer (ed.), 190–209.
- König, Ekkehard–Johan van der Auwera
1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert–Giuliano Bernini–Claude Buridant (eds.), 337–355.
- Kortmann, Bernd
1991 *Free adjuncts and absolutes in English: Problems of control and interpretation*. London: Routledge.
- Kuno, Susumu
(1986) *The structure of the Japanese language*. (7th edition.) Cambridge, MA: MIT Press.
- Lehmann, Christian
1988 "Towards a typology of clause linkage", in: John Haiman–Sandra A. Thompson (eds.), 181–225.
- Levinson, Stephen
1987 "Minimization and conversational inference", in: Jef Verschueren–Marcella Bertucci-Papi (eds.), 61–129.
- Lodge, David
1975 *Changing places*. Harmondsworth: Penguin.
- Nedjalkov, Igor
this volume "Converbs in Manchu-Tungusic languages".
- Nedjalkov, Vladimir P.
this volume "Some typological parameters of converbs".
- Parisi, Domenico–Christiano Castelfranchi
1976 "Tra ipotassi e paratassi", *Rivista di Grammatica Generativa* 1: 55–98.
- Pasch, Renate
1986 "Negationshaltige Konnektive", *Untersuchungen zu Funktionswörtern* II, 63–171. (Linguistische Studien 143.) Berlin: Akademie der Wissenschaften der DDR.
- Pusch, Luise F.
1980 *Kontrastive Untersuchungen zum italienischen 'gerundio'*. Tübingen: Niemeyer.
- Rappaport, Gilbert C.
1984 *Grammatical function and syntactic structure: The adverbial participle of Russian*. (UCLA Slavic Studies, 9.) Columbus, OH: Slavica Publishers.
- Rath, Rainer
1971 *Die Partizipialgruppe der deutschen Gegenwartssprache*. Düsseldorf: Schwann.
- Reese, Susanne
1991 *Gerundialkonstruktionen im Spanischen: Ansatz zu einer grammatisch-pragmatischen Beschreibung*. (Tübinger Beiträge zur Linguistik, 349.) Tübingen: Gunter Narr.
- Růžicka, Rudolf
1978 "Erkundungen für eine Typologie der syntaktischen und semantischen Strukturen der Gerundien (Adverbialpartizipien) in modernen slawischen Literatursprachen", *Zeitschrift für Slawistik* 23: 229–244.
- Slobin, Dan
this volume "Converbs in Turkish child language: The grammaticalization of event coherence".
- Stewart, Mary
1970 *The crystal cave*. London: Coronet.

Stump, Gregory T.

1985 *The semantic variability of absolute constructions*. Dordrecht: Reidel.

Tikkanen, Bertil

1987 "Finiteness and non-finiteness as parameters in clause linkage", in: Lilius Pirkko-Mirja Saari (eds.) *The Nordic Languages and Modern Linguistics* 6. Helsinki: Helsinki University Press.

this volume "Burushaski converbs in their South and Central Asian areal context".

Verschueren, Jef-Marcella Bertucelli-Papi (eds.)

1987 *The Pragmatic Perspective. Selected Papers from the 1985 International Pragmatics Conference*. Amsterdam: Benjamins.

Weiss, Daniel

1977 *Syntax and Semantik polnischer Partizipial-Konstruktionen*. (Slavica Helvetica, 10.) Bern: Peter Lang.

Zaefferer, Dietmar (ed.)

1991 *Semantic universals and universal semantics*. Berlin: Foris.

Some typological parameters of converbs*

Vladimir P. Nedjalkov

1. Dependent and independent taxis

In a discussion of the category of taxis, Roman Jakobson wrote, with reference to data from the Nivkh language: "Taxis characterizes the communicated fact in relation to another communicated fact and independently of the fact of communication." According to Jakobson, dependent taxis expresses "different types of relations to the independent verb – simultaneity, precedence, interruption, concession, etc." (Jakobson 1957).

It is clear from Jakobson's paper that he subsumes not only relative-tense meanings under dependent taxis, but also some adverbial meanings. And furthermore, the typical form of dependent taxis is, according to him, the converb (*deepričastie*).

This article represents a provisional variant of one of the sections of a collective work in preparation which is devoted to the typology of converbal constructions (see also Nedjalkov–Otaina 1987: 296–319).

2. Definition of the converb

As a first approximation, we can define a converb as a verb form which depends syntactically on another verb form, but is not its syntactic actant, i. e., does not realize its semantic valencies. Thus, a *canonical* (i. e., noncombined) converb can occupy (1) the position of an adjunct, i. e., an adverbial, but cannot occupy the positions: (2) of the only predicate of a simple sentence (without additional auxiliary elements); (3) of nominal attributes; (4) of a clausal actant (i. e., it cannot depend on verbs such as *begin*, *order*, etc.); (5) of a nominal actant (i. e., it does not occur in subject and object position) (see, for instance, Ramstedt 1939, Xolodovič 1954: 147, Sanžeev 1963: 227, Čeremisina 1986 b: 33–34).

In the four last positions mentioned above, the following verb forms occur canonically: in the second position – a finite form; in the third position – a participle; in the fourth position – an infinitive; in the fifth position – a gerund (i. e., a deverbal noun that is part of the system of verb forms).¹

3. Three main types of converbs according to the syntactic function they fulfill

The three types of converbs mentioned below represent ideal cases. In reality, it seems, most converbs combine several of these functions.

3.1. The function of an adverbial in a simple sentence

Converbs with this function will be called *converbs proper*. The function of an adverbial is often expressed by Russian converbs, for instance, and also by Bashkir converbs in *-p*, for example:

- (1) Bashkir (Juldašev 1977: 53)
Ap-ak zur paroxod sajkal-yp jöz-op bar-a.
 very-white big steamer rock-CONV float-CONV go-PRES
 'The big white steamer floats, rocking to and fro.'

3.2. The function of a secondary or coordinate predicate

Converbs with this function will be called *coordinative converbs*. This function, which is also shared by Russian converbs (see, e.g., Čeremisina 1977: 5) is similar to the function of the English conjunction *and* (sometimes *but*) or to asyndetic coordination of the type *I came, saw, conquered*. The Bashkir converb in *-p* expresses this function in as many as 80 percent of its uses (Juldašev 1977: 29). A similar picture is also found in several other Turkic languages. Thus, the Russian sentence (2 a) can be rendered in Turkmenian by means of four converbs in *-p* and a clause-final finite verb (2 b). The use of a finite verb in all five cases would give the impression of an artificial sentence construction.

- (2) a. Russian
On podošel₁ k dveri, postučal₂, posmotrel₃ v zamočnuju skvažinu,
 he went.up to door knocked looked in lock's hole
postojal₄ minuty dve, da i tak i ušel₅ ni s čem.
 stood minutes two PT and thus also left NEG with what
 'He went up to the door, knocked, looked through the keyhole,
 stood for about two minutes, and then went away without anything.'
- b. Turkmenian (Dmitriev 1962: 401)
Ol gapa jakynlaş-yp₁, gapa-ny dyrkyldat-yp₂, gulpuň
 he door approach-CONV door-ACC knock-CONV lock-GEN

dešegin-den seredi-p₃, bir=iki minut tur-up₄ xač
 hole-ABL look-CONV one=two minute stand-CONV nothing
zatsyz git-di₅.
 without go.away-PAST
 [as above]

3.3. The function of the predicate of a subordinate clause

To be more precise, we should perhaps speak here of the analog of adverbial subordinate clauses in European languages. This last function presupposes that the converb can have its own subject (i. e., subject different from the subject of the superordinate verb), i. e., a constituent that is the counterpart of the underlying subject in the derived converbal construction. This third type of converb may be called a *conjunctive converb*, because its function is similar to the function of subordinating conjunctions in European languages (the term is adopted from Kibrik 1977: 2, 260). For example:

- (3) Bashkir (Juldašev 1977: 80)
Ul qapqany ŷğyrđatyn as-yp in-gänse, Salix
 he gate-ACC creak-CONV open-CONV go.in-CONV Salix
duđǵal-maj baθ-yp tor-za.
 move-CONV press-CONV stand-PAST
 'Until he went inside, opening the gate with a creak, Salix stood motionless.'

These three functions, as well as a number of nonsyntactic functions (see section 4), have been noted in the literature (see, e. g., Korkina 1985: 77).

4. Three main nonsyntactic functions of converbs

These functions have nothing to do with taxis, they are mentioned only for the sake of completeness and are not considered further in this paper. The following uses of converbs are involved here (these are no longer converbs in the proper sense of the word, but their homonyms):

1. Converbs as constituents of complex verbs (new lexical units), often formed by nonstandard means of word formation, for example:

- (4) Bashkir
bat-yp al 'buy', lit. 'take, selling'
 [*bat* 'sell'; *al* 'take, receive'; *-yp* is a converb suffix]

- (5) Khalkha Mongolian (Bobrovnikov 1849: 314)
emčle-n anagaa ‘cure, heal’, lit. ‘make healthy, curing’
[-n is a converb suffix]
2. Converbs as constituents of complex verbs formed by standard rules, including (semi-)auxiliary verbs that express various aspectual meanings, as in:

(6) Bashkir (Juldašev 1977: 129-30)
ölgör ‘be in the process of ripening’ → *ölgör-öp jet-* ‘become ripe’
bar ‘go’ → *bar-yß jet-* ‘reach’
[*jet-* ‘reach’]
3. Converbs as constituents of synthetic or analytic forms that are part of the tense-aspect paradigm of the verb, for example:

(7) Uzbek (Kononov 1960: 220–225)
išla- ‘work’ → a. *išla-b-ma* ‘it appears that I have worked’
[subjective past]
išla- ‘work’ → b. *išla-b edi-m* ‘I have just/recently worked’
[recent past]

4.1. Converbs and conjunctions

It has been observed that in languages that make an extensive use of conjunctions converbs play a minor role or are completely absent. Thus, in the system of colloquial Russian, for example, converbs do not exist as a verb form with the specific syntactic function of expressing dependent predication (Krasil'nikova 1973: 174). Conversely, in languages that make extensive use of converbs, the role of conjunctions is less important. There is, for example, not a single conjunction in Korean, but to make up for this the number of converbs comes close to 60 (Račkov 1958: 40–41). It would therefore seem that we can group together conjunctions and converbs semantically, the main difference being their formal coding. Indeed, one cannot deny a significant parallelism of meaning between adverbial clauses introduced by conjunctions and converb constructions. But there are also significant differences between converbs and conjunctions. For instance, constructions with converbs and conjunctions are by no means always interchangeable in languages that have both converbs and conjunctions. Furthermore, sentences of “converbal” languages often cannot be translated into “conjunctive” languages in such a way that a conjunctive construction corresponds to each converb. Let us take two such examples from a converbal language, Nivkh. In the following Nivkh sentence there are six verb forms, one finite verb and five converbs.

- (8) Nivkh
ni laŋr ... ɲəŋ-t axot-ke ʧəlujo-gu-t
 I seal seek-CONV hunt-CONV get.into.fog-CAUS-CONV
lerler-ke lərke-t p'rad'-ra.
 get.lost-CONV swim-CONV come-INTCONV
 'I was hunting and looking for seals, I got into a fog, got lost and came swimming here.'

The converbs *ɲəŋ-t*, *ʧəlujo-gu-t*, and *lərke-t* depend syntactically on the immediately adjacent converb forms; the converbs *axot-ke* and *lerler-ke* depend on the final predicate, where *-d'-ra* is the marker of the finite verb in the dialog (the example is from Panfilov 1965: 244).

In the second sentence of the following example (also from Nivkh) there are five converbs and one finite verb:

- (9) Nivkh (Panfilov 1965: 230)
boxo-ŋan if hə k'ut-əx toj-ra mif-tox
 then-CONV he this opening-LOC crawl-INTCONV ground-DAT
məy-ra (had'); kəpr-ror ku-ye
 descend-INTCONV AUX-FIN get.up-CONV.PF bow-and
pun'd'-ye bo-r taŋra-r hum-ke pak
 get.ready-CONV take-CONV get.ready-CONV be-CONV.DUR cuckoo
k'ut-əx p'u-ivo pun'd'-yir ʧa-d'.
 opening-LOC go.out-CONV bow-INSTR shoot-FIN
 'Then he crawled through this opening, went down on the ground (so he did). Getting up, taking bow and arrows, getting ready, was for a long time (?), when the cuckoo came out of this hole, he shot from the bow.'

Although the Nivkh converbs can often be translated by Russian converbs and conjunctive adverbial clauses, such a translation may be difficult to understand when Nivkh converbs are accumulated in one sentence. The Nivkh speaker easily concatenates one converb with another within one sentence, whereas a similar accumulation of Russian converbs and adverbial clauses is impossible.

5. Unidirectionally dependent and interdependent converbs

Unidirectionally dependent converbs depend on a superordinate verb which does not itself depend on a converb. These converbs are represented in all the examples above. In (9) there are converbs in *-ra/-ta* (see subsection 17.4.2 for

the choice of *-ra* or *-ta*), i. e., converbs that occur at least in pairs. These converbs belong to the class of coordinative converbs (cf. section 3.2) and indicate that the action they express is not the only one, that there will be at least one converb of the same type further on (a similar converb exists also in Korean, cf. Xolodovič 1954: 148–149). In some dialects of Nivkh, these converbs are obligatorily followed by the auxiliary finite superordinate verb *ba-d'* 'it is/was thus, it happens/happened' (on which the converb depends syntactically); in other dialects the auxiliary finite verb is optional, so that this converb can conclude an utterance. This is the reason for including the specification "only (predicate of a simple sentence)" in the definition of the converb (cf. section 2).

6. Converbs and absolute constructions

It seems that an intermediate position between constructions with converbs and constructions with conjunctions is represented by absolute constructions with participles, as for instance in German. They are probably closer to the converbs, but at present their exact typological position is hard to determine. For example:

- (10) ... standen die Gefangenen mit dem Gesicht zur Wand, die
 stood the prisoners with the face to:the wall the
 Hände hinter dem Kopf gefaltet.
 hands behind the head folded
 '... the prisoners stood with their faces toward the wall, with their
 hands folded behind their heads.' (B. Apitz, example from Filipović
 1977: 171)

In what follows such cases will be provisionally considered together with the converb. It cannot be excluded that this type is also represented by the Estonian converbs in *-nud* (cf. example [13]), the Lithuanian different-subject converbs with a dative subject (cf. example [29b]), and possibly some other converbs considered below.

7. Canonical converbs and quasi-converbs

In our preceding discussion, the form of the converb was defined and the main functions of canonical (i. e., noncombined) converbs were enumerated. The functions that in some languages are fulfilled by canonical converbs can be fulfilled in other languages (and often also in the same languages) by forms that

also have other functions, especially functions that are typical for the participle, the infinitive and the gerund. In typological studies of converbal constructions it is useful to have a common term for such multifunctional formations. We propose the working term *quasi-converb* (i. e., combined converb). The term converb is sometimes also used generically to cover both the terms quasi-converb and converb. The proposed working term is in no way meant as an appeal to revise the established terminology in grammars of individual languages.

The joint consideration of different forms that fulfill similar functions does not require any further justification – see also Čeremisina 1986 b: 57–65.

8. Converb and appositive participle

In the case of multifunctional nonfinite forms (i. e., such forms that in different contexts combine the basic functions of converb, participle, infinitive and gerund) it seems appropriate to consider the function with the highest text frequency as the main function. It is also clear that this form should be named according to its main function. In practice, however, determining the main function is not always a straightforward matter: first, because of transitional cases where one nonfinite form is formed from another (as happened, for instance, with the Russian converbs, which go back to appositive participles manifesting agreement [cf., e.g., Kudrjanskij 1916]; in this connection the term appositive *participle-converb*, used by V. I. Borkovskij [Borkovskij–Kuznecov 1965: 351] is significant); secondly, because of nonequal statistical characteristics of different voice and aspect forms which are traditionally subsumed under one and the same nonfinite form. Note in this connection that sometimes the term *participle* is used for forms that in actual fact are not (or only rarely) used in the function of a nominal modifier. For example, while the English active nonperfect participle of the type *asking* is used both in adverbial (i. e., converbal) and attributive (i. e., participial) functions, its passive nonperfect form (*being asked*) is very rarely used attributively, and the perfect active and passive forms (*having asked*, *having been asked*) are almost exclusively used in adverbial function, although they are perfectly grammatical in attributive function (cf., e.g., Kaušanskaja et al. 1959: 158, as well as Čeremisina 1986 b: 39 and Gorelova 1980 a: 31).

One also has to take into account that in principle a twofold interpretation – attributive and adverbial – of one and the same nonfinite form in a specific sentence is possible, as in:

- (11) English
 The man, pacing the floor, said ...
 a. ‘the man, who was pacing the floor, ...’
 b. ‘the man, while pacing the floor, ...’

9. Five main types of (quasi-)converbs according to the number of functions expressed.

Sixteen main types of combination of converbal and nonconverbal functions

Instances of the first type are the canonical converbs; the remaining four are (potential) quasi-converbs.

9.1. The monofunctional or canonical converb

This type of converb is represented, by and large, by the Russian forms in *-a*, *-v/-vši*, the Estonian forms in *-des*, the Lithuanian forms in *-dam-* (the so-called semi-participles), and others. For example:

- (12) Estonian
Ületa-des jõge pöördus ratsanik ulati paremale.
 cross-CONV river turned horseman always right
 'Crossing the river, the horseman always turned right.'

9.2. The bifunctional converb

The function of the converb is combined with one other function. Here the following four types of combinations are possible:

1. converb and participle;
2. converb and infinitive;
3. converb and gerund;
4. converb and finite verb.

Examples of the first and second case are:

- (13) Estonian
- a. *Ületa-nud jõe, pöördus ratsanik paremale.*
 cross-CONV river turned horseman right
 'Having crossed the river, the horseman turned right.'
 - b. *Jõe ületa-nud ratsanik pöördus paremale.*
 river cross-PTCP horseman turned right
 'The horseman who crossed the river turned right.'
- (14) Chukchi (cf. Nadjalkov–Inènlikej–Raxtilin 1983: 223–225)
- a. *gora-ŋə təm-ək ənən rəwe-nin.*
 deer-ABS kill-CONV he:ERG gut-he.it
 'Having killed the deer, he gutted it.'

- b. *ənən rəpaaw-nenat təm-ək qora-t.*
 he=ERG stopped-he.them kill-INF deer-PL
 'He stopped killing deers.'

On the fourth type in Altay, see Čeremisina–Šamina 1986: 153; Čeremisina 1986 b: 45.

9.3. The trifunctional converb

The function of the converb is combined with two other functions. There are six possible types of combination here (cf. Čeremisina 1986 b: 40):

1. converb and participle and infinitive;
2. converb and participle and gerund;
3. converb and participle and finite verb;
4. converb and infinitive and gerund;
5. converb and infinitive and finite verb;
6. converb and finite verb.

Examples of the first type are:

- (15) Lithuanian
- a. *Tėvas parūk-ęs (rūky-dam-as) išėjo iš kambario.*
 father smoke-CONV smoke-CONV-M.SG went.out from room
 'Father, having smoked (smoking), went out of the room.'
 - b. *Pa-rūk-ęs (rūk-ant-is) tėvas išėjo iš kambario.*
 smoke-PTCP smoke-PTCP-M.SG father went.out from room
 'Father, who had smoked (was smoking), went out of the room.'
 - c. *Tėvas liovėsi rūk-ęs (≈ rūky-ti).*
 father stopped smoke-PTCP smoke-INF
 'Father stopped smoking.'

The present tense converb (cf. *rūky-dam-as* in [15 a]) is not combined with the participle (cf. *rūk-ant-is* in [15 b]). In Lithuanian grammars, forms of the type *rūky-dam-as*, which are never used attributively, are traditionally called "semi-participles" for some reason; forms of the type *pa-rūk-ęs* are called "attributive participles" or "semi-predicative (adverbial appositive) participles", depending on their use (both forms are same-subject converbs). The term "converb" (*padahyvis*) is used only for noninflected different-subject forms like those described in 12.2.2 (cf. Ambrazas 1985: 306–321).

9.4. The quadrifunctional converb

The function of the converb is combined with three other functions. There are four possible types of combination here:

1. converb and participle and infinitive and gerund;
2. converb and participle and infinitive and finite verb;
3. converb and participle and gerund and finite verb;
4. converb and infinitive and gerund and finite verb.

Examples of the first type are:

- (16) English
- a. *Crying, the girl entered the room.*
 - b. *A crying girl entered the room.*
 - c. *The girl started crying (\approx to cry).*
 - d. *The girl's crying irritates me.*

A widespread view here is that there are two homonymous forms – participles and gerunds (which have fallen together historically). But this is not the only view.

9.5. The quinquefunctional converb

The function of the canonical converb is combined with four other functions:

Converb and participle and infinitive and gerund and finite verb.

So far no examples have been found.

10. Three main semantic types of converbs

We distinguish the following three types, ordered by decreasing specificity of meaning: (1) *specialized* converbs have one or two meanings of the adverbial type; (2) *contextual* converbs have three or more adverbial meanings that are realized under certain conditions (cf. Džanmavov 1967: 43, 62–74, 275–277); (3) *narrative* converbs express a coordinative connection that advances the narration. The three types distinguished below represent ideal cases. In reality converbs are often characterized by a greater or lesser degree of closeness to these ideal cases. These three semantic types are correlated with the three functional types of converbs (cf. section 3) in the following ways: specialized converbs are associated with types 3.1 and 3.3; contextual converbs are associated with types 3.1 and 3.2, and narrative converbs are associated with type 3.2.

10.1. Specialized converbs

These can be subdivided into two groups: (1) temporal converbs – with the fundamental meanings of simultaneity, anteriority and posteriority; and (2) non-temporal converbs.

10.1.1. Temporal specialized converbs

The temporal meanings mentioned in 10.1 can be illustrated by the following examples.

1. Simultaneity, for example:

- (17) Udmurt (Perevoščikov 1959: 56–70, 272–284)
Už-a-ku-m kuaž xoriz.
 work-CONV-1SG rain went
 ‘While I worked, it was raining.’

2. Anteriority, for example:

- (18) Mari (Isanbaev 1961: 50–61)
Tol-meke-m avam ojala ...
 come-CONV-1SG my:mother said
 ‘When I came, my mother said ...’

3. Posteriority (see also example [3]), for example:

- (19) Evenki (Konstantinova 1964: 211–212)
Nuŋan ukumni-va emev-re-n, teligne suru-mnen.
 he milk-ACC bring-NONFUT-3SG then go.away-CONV
 ‘He brought milk, then went away.’

10.1.2. Non-temporal specialized converbs

These are converbs with the fundamental meanings of manner, cause, purpose, real condition, irreal condition, concession, comparison, intention, result, contrast, accompanying circumstance, etc. For example:

- (20) Nivkh (Panfilov 1965: 129)
čax tuž-gin ola-gu mra-d'-yu-da.
 water cold-CONV.CONC child-PL bathe-FIN-PL-EMPH
 ‘Although the water was cold, the children bathed.’
- (21) Nivkh (Panfilov 1965: 125–126)
čəŋ n'-erkon-ɤaj ni t'aqo-yir čəŋ
 you.all me-touch-CONV.COND I knife-INSTR you.all

čev-na-d'-ra.

cut-FUT-FIN-EMPH

'If you hurt me, I will cut you with a knife.'

In some languages, temporal converbs are quantitatively predominant (e.g., Nivkh), in others adverbial converbs are predominant (e.g., Korean).

10.2. Contextual converbs

Such are, for example, Estonian and Russian converbs. For example:

(22) Estonian

- a. *Närveeri-des kõnnib (harilikult) ta mööda tuba.*
worry-CONV walk:3SG usually s/he along room:PART.SG
'Worrying [i.e., when he is worried], he (usually) walks about the room.'
- b. *Ta kõnnib mööda tuba närveeri-des.*
s/he walk:3SG along room:PART.SG worry-CONV
'He is walking about the room worrying'
[with unrest; manner meaning, cf. Boguslavskij 1977: 276]

Contextual converbs can express such meanings as simultaneity, anteriority, posteriority, cause, concession, manner, accompanying circumstance, condition, goal, place, and others. The ranges of meanings that can be expressed by contextual converbs in different languages usually do not coincide exactly. Thus, for example, the converbs are semantically more diverse (and more frequent) in Russian than in the other Slavic languages.

The conditions under which particular contextual meanings from the above list are realized can be rather complex. For instance, the realization of the causal meaning in Russian converbs depends, according to Jurij D. Apresjan, on the following heterogeneous conditions:

- (a) The verb in the converb form has the semantic feature "stative", like *ljubit* 'love', *gordit'sja* 'be proud', *znat'* 'know', *sčitat'* 'consider', *žazdat'* 'thirst, crave', *želat'* 'desire', *imet'* 'have', *raspolagat'* 'dispose' (semantic condition); (b) the converb has an imperfective aspect form (morphological condition); (c) this form has the ongoing-durative (or processual) meaning (another semantic condition); (d) the superordinate predicate verb is used in the fundamental meaning of the perfective aspect, or in the historical present meaning of the imperfective aspect (a condition of semantic combinability). (Apresjan 1983: 337).

Compare:

- (23) a. *Ljubj-a lest', on okružil sebja podxalimami.*
like-CONV flattery he surrounded himself with:sycophants
'Liking flattery, he surrounded himself with sycophants.'

The four specific conditions for the causal meaning mentioned above are complemented, according to Apresjan, by another three more general conditions that are almost always required for the realization of special meanings of the converbs: (1) preposing of the converbal construction before the predicate verb (syntactic condition); (2) absence of government of the converbal construction by the predicate verb (syntactic condition); (3) noncoincidence of the semantic class of the converbal verb with the class of the predicate verb (condition of semantic combinability) (cf. Apresjan 1983: 335). If it is possible to formulate such language-internal (i. e., grammatical or semantic) conditions for the realization of a meaning under which it cannot fail to be present, then according to Apresjan this meaning must be recognized as an independent unit of the semantic system of the language. Otherwise such a unit cannot be recognized (Apresjan 1983: 335). Thus, for instance, the meaning of cause cannot be language-internal in (23 b), because no conditions for its realization have (so far?) been established; this meaning results only from the context (an area of meaning indeterminacy), as in:

- (23) b. *Poterjav dve treti boevogo sostava, protivnik otstupil.*
 lose:PFV.CONV two thirds combat force enemy retreated
 'Having lost two thirds of the combat force, the enemy retreated.'
 (Apresjan 1983: 333)

In Apresjan (1983), five meanings of Russian converbs are considered: anteriority, simultaneity, cause, condition, place. Igor' M. Boguslavskij's article investigates the language-internal conditions for the realization of the meanings of simultaneity and manner in Russian converbs (Boguslavskij 1977).

10.3. Narrative (coordinative) converbs

This is the term for converbs that can express three or more completed actions in succession that advance the narration. Here the syntactic dependence relation is often not accompanied by semantic dependence (cf. Zakiev 1963: 294; Bertagaev 1964: 172; Juldašev 1977: 244; Čeremisina 1986 a: 28–29). Narrative converbs exist, for example, in Turkic and Mongolian languages, in Japanese, Nivkh, Hindi, Tamil, Manchu, but they are lacking in Slavic and Finno-Ugric languages and in Evenki.

Converbs may combine narrative and contextual functions. Thus, the Turkic narrative converbs in *-p* can also express the meanings of cause, condition, manner, etc.

Narrative converbs are usually more frequent in texts than all other converbs together, and in some languages they are more frequent than finite verbs. Table 1 provides data for four unrelated languages.

Table 1. Text frequency of narrative converbs (percentages)

Language	Total number of converbs	Forms of narrative converbs	Text frequency (percentages)			
			narrative converbs	other converbs	narrative converbs	finite verbs
Mongolian	15	- <i>ж</i> , - <i>aad</i>	86	14	65	35
Nivkh	25	- <i>r/-i</i> , - <i>ra/-ta</i>	74	26	52	48
Karachay-Balkar	10	- <i>b</i> (- <i>p</i>)	67	33	45	55
Manchu	11	- <i>fi</i>	34	66	52	48

11. Three main referential types of converbs

Two types of constructions can be distinguished according to the coreferentiality of the subjects of the converb and the superordinate verb: *same-subject* constructions (cf. example [1]) and *different-subject* constructions (cf. example [3]). Correspondingly, three types of converbs are distinguished: *same-subject* converbs (where the converb subject and the subject of the superordinate verb are always coreferential), *different-subject* converbs (where the converb subject and the subject of the superordinate verb are never coreferential, cf. [29 b]), and *varying-subject* converbs (these occur both in same-subject [as in example (12)] and in different-subject constructions [cf. example (24)]). Compare:

- (24) Estonian
Talve möödu-des nägin teda uuesti.
 winter:GEN pass-CONV I:saw him again
 'After the winter I saw him again.'

With same-subject converbs the subject cannot be overtly expressed in most cases, so it is only expressed with the superordinate verb. This is the situation, for example, in modern Russian, where converbs do not have a valence position for the subject. More rarely we find languages where the subject can be expressed with the converb, but can also be omitted when identical with an actant of the superordinate verb, for example:

- (25) Abkhaz (Čkadua 1970: 130)
K'asa izaar ažək° rej ick'a-nə,
 Xusa brought-to.him corn having.ground accurately
izt'°u iriton.
 to:its:owners returned

'Having ground the corn brought to him cleanly, Xusa returned it to its owners.'

On the other hand, we also find an optional or obligatory doubling of the subject by a reflexive pronoun that is used, in Čeremisina's terminology (Čeremisina 1979: 64), in the role of a double subject, as in example (26). (The postposition *ənke*, like other postpositions that function as converb markers, always immediately follows the verb stem that functions as a verbal noun.)

- (26) Nivkh
P'i vi-nə ənke ni tə k'e ov-d' tvi-yat-nə-d'.
 self go.away-FUT before I this net repair finish-PE-FIN
 'Before I go away, I will finish repairing this net.'

Depending on whether the subject of the converb can be expressed as an actant dependent on it, different-subject constructions are subdivided into explicit constructions (cf. example [24]) and implicit constructions (cf. example [27]). In the latter case, certain semantic arguments of both actions are often linked by referential or possessive relations or pragmatically. One participant in the situation can give the "coordinates" by which the other participant is easily recognized.

The same is also true for the different-subject use of those converbs which are as a rule same-subject (cf. Čeremisina 1980 a: 15–16; Skribnik 1986 a: 163); compare:

- (27) Russian
*(*Ja) vozvratjas' iz cerkvi, posetil menja doktor Štender.*
 I return:PFV.CONV from church visited me doctor Štender
 'Returning from church, doctor Štender visited me.'

(The example is from Yokoyama 1983: 379–380; cf. als Kovtunova 1964: 399; Brodskaja 1980: 41–42; Gorelova 1980 b: 86; Efremov 1980: 65). Prescriptive grammar would require the interpretation that the doctor returned from church, whereas the intended interpretation is that the speaker returned.

12. Six main ways of expressing the different-subject property in the verb structure

Below we will consider only those converbs that correlate to some extent semantically or – most often – morphologically. Firstly, three types are distinguished, and within each of these, two symmetric subtypes are differentiated. Several of these types can be combined with each other (cf. section 12.4). The greater

markedness of some converb can be due to two factors: (1) the formally derived nature of the converb marker; (2) the existence of agreement markers on the converb.

12.1. The different-subject converb is formally more marked than the same-subject converb

12.1.1. *The different-subject converb is derived from the same-subject converb*

This case is represented by Nivkh in the case of the same-subject converbs in *-ror/-tot* and the different-subject converbs in *-gu-ror/-gu-tot* which include an additional causative suffix *-gu/-hu* (cf. example [32]; see also Oswalt 1977: 46–54).

12.1.2. *The different-subject converb agrees with the subject, the same-subject converb does not agree*

There is no “pure” example, but to a certain extent the Evenki and Buryat varying-subject converbs are relevant: in the different-subject use they can have agreement forms (six in Evenki, three in the singular and three in the plural, and five in Buryat, where the third person does not differ in number), but in the same-subject use they have only one form (in Buryat) or two forms (in Evenki: singular and plural); cf. examples (37) to (40).

12.2. The same-subject converb is formally more marked than the different-subject converb

12.2.1. *The same-subject converb is derived from the different-subject converb*

This case is represented by the Eskimo converbs. In Eskimo, intransitive converbs agree with the subject, and transitive converbs agree with the subject and/or the direct object (cf. *tagi-sja-m-kyn* ‘when I [-m-] brought you [-kyn]’, where *-sja* is the anteriority suffix; *tagi-sja-m-si* ‘when I brought you-all’, etc.). And when the converb agrees with a subject in the first or second person, then it can be used both in a same-subject sense and in a different-subject sense with the superordinate verb in the first, second, and third person: the endings of the converb and the superordinate verb clearly indicate one or the other use. But if the subject of the converb is expressed by a noun (or a third person pronoun), then the agreement suffixes of the converb must obligatorily indicate different- or same-subject status. Intransitive converbs use different suffixes here (cf. example [31]). In transitive converbs, an element *-ni-* or *-mini-* appears between the converb suffix and the person marker. This element goes back to a possessive-reflexive suffix with the meaning ‘self’s’ which always refers to a third person possessor (cf. *pana-ka* ‘my spear [absolute]’, but *pana-ni* ‘self’s spear [absolute]’; *pana-ma*

'of my spear [genitive]', but *pana-mi* 'of self's spear [genitive]'; *pana-m-ni* 'on my spear' [*-ni* indicates locative], but *pana-mi-ni* 'on self's spear [locative], etc.). For example:

- (28) Eskimo (Menovščikov–Vaxtin 1983: 151)
- a. *Tagis-ja-Ø-ŋa,* *aqum-uma-ŋa.*
bring-CONV.ANT-3SG.ERG-1SG.ABS sit.down-PAST-1SG.ABS
'He having brought me, I sat down.'
- b. *Tagis-ja-mini-ŋa,* *aqum-uma-q.*
bring-CONV.ANT-SS.3SG.ERG-1SG.ABS sit.down-PAST-3SG.ABS
'(He) having brought me, he sat down.'

12.2.2. *The same-subject converb agrees with the subject, the different-subject converb does not agree*

This case can be illustrated by the Lithuanian noninflecting converbs which are always different-subject, whereas the so-called semi-participles in *-dam-* (cf. example [15 a]) and the adverbial participles (cf. example [29 a]) are same-subject, for example:

- (29) Lithuanian (Musteikis 1972: 226–229)
- a. [obligatorily same-subject]
Ruta išėj-us-i iš miško, pamatė jį.
Ruta go.out-PTCP-F from forest saw him
'Ruta, having gone out of the forest, saw him.'
- b. [obligatorily different-subject]
Rutai išėj-us iš miško, patekėjo saulė.
Ruta:DAT go.out-CONV from forest rose sun
'When Ruta went out of the forest, the sun rose.'

This construction allows also a different treatment in terms of markedness: (1) the different-subject status of the converb is marked by the subject in the dative case (normally it is in the nominative); (2) in a language with regular grammatical agreement, it is not the presence of agreement that is marked (as usual), but its absence.

Similar constructions with an independent dative (but with a declined participle) existed in Old Church Slavonic, as well as in Old Russian (Peregonceva-Grave 1955).

12.3 The different-subject and the same-subject converbs are morphologically unrelated ("suppletive" relation)

12.3.1. The same-subject and different-subject markers of the converb alternate

An example from Hopi:

- (30) Hopi (Kalectaca 1978: 149–150)
- a. *Nu' pakí-t pu' qatuvtu.*
I come-SS.CONV then sit.down
'I came and sat down.'
- b. *Nu' pakí-q pu' pam qatuvtu.*
I come-DS.CONV then she sit.down
'I came and she sat down.'

There are also more complex alternations, as, for instance, in Fore (New Guinea) where the different-subject marker cumulatively expresses also the subject (person and number) and the tense of the converb, and is followed by a marker of person and number of the finite verb (!) (Scott 1978: 120–136).

12.3.1.1. Combination of the marking types

In this case, (a) same-subject and different-subject markers alternate, and (b) the different-subject marker is accompanied by subject agreement markers and/or a postposition, etc. This type combines cases 12.3.1 and 12.1.2. This is apparently the type of the Evenki meaning pair consisting of the same-subject converb in *-mi* and the different-subject converb in *-rak* (cf. Gorelova 1980 c: 102–103). A similar relationship in Yakut temporal constructions has been specifically investigated by Nikolaj N. Efremov, who notes the following correlation. In the same-subject case immediate precedence is expressed by the converb form in *-aat*, in the different-subject case it is expressed by a form consisting of the participle in *-ar* plus possessive person marker plus accusative marker plus postposition *kytta*. Most simple converbs are used only in same-subject constructions (Efremov 1980: 64, 70).

12.3.2. The same-subject and different-subject endings of the converb alternate

This case is realized in several Eskimo converbs with a third person subject, for example:

- (31) Eskimo (Menovščikov–Vaxtin 1983: 143)
- a. *Mylug-lu-ní, aqum-uma-q.*
smoke-CONV-3SG.SS sit.down-PAST-3SG
'Having started to smoke, he sat down.'

- b. *Mylug-lu-ku, aqum-uma-q.*
 smoke-CONV-3SG.DS sit.down-PAST-3SG
 'Having started to smoke, he sat down.'

(Compare [31 b] with example [50].)

13. Four types of languages according to the agreement of the converb and the agreement of the finite verb

These are the four types: (1) both the converb and the finite verb agree with their subject (Eskimo, cf. example [28]); (2) neither the converb nor the finite verb agree with their converb (Japanese); (3) the finite verb, but not the converb agrees with the subject (Chukchi, Russian); (4) the converb, but not the finite verb agrees with the subject. There are no "pure" examples for this last case, but it can be illustrated by several examples of Nivkh converbs (where there is no agreement marker attached to a converb marker, but the converb marker itself changes, cf. examples [22 a] and [32 b]), and also by a group of Mongolian converbs. In (32 a) the suffix *-ror* marks a subject of second or third person singular, while the suffix *-tot* in (32 b) marks the other four forms (the plural suffix *-yu* is optional).

- (32) Nivkh
- a. *if mujna-ror p'ra-d'.*
 he be.sick-CONV come-FIN
 'He, having gotten over the illness, came.'
- b. *imŋ mujna-tot p'ra-d'(-yu).*
 they be.sick-CONV come-FIN(-PL)
 'They, having gotten over the illness, came.'

13.1. Agreement not with the "own" subject

In the different-subject use of the Nivkh converb in *-ror/-tot*, the causative suffix *-gu/-ku-* is added to it. Although the causative meaning is not present, the converb agrees not with its own subject, but with the subject of the sentence, i. e., as in real causative constructions (cf. *imŋ vi-d'(-yu)* 'They went away' → *ətək imŋ(-ax) vi-gu-d'* 'Father sent them'). The subject of the converb can optionally be marked with the accusative-causative case in *-ax*, which is used only with verbs in *-gu/-ku-*, as in:

- (32) Nivkh
 c. *imŋ(-ax) mujna-gu-ror atak p'ra-d'.*
 they sick-CAUS-CONV father come-FIN
 'After they had finished being sick, father came.'
 (lit. 'Having let them get over the illness, ...')

If (32 c) can be seen as formally same-subject and semantically different-subject, then (27) can be regarded as, conversely, formally different-subject and semantically same-subject (both in the converbal construction and in the main clause the first person is the main character).

14. Four types of languages according to agreement of the converb with the subject

The four types are the following: (1) all or almost all converbs of the language agree with its subject: Eskimo (cf., among others, examples [28] and [31]), Yakut (Korkina 1985: 187); (2) no converb of the language agrees with its subject (Chukchi, Russian); (3) some converbs agree, but other converbs do not agree with the subject (Nivkh); (4) one and the same converb in the language can or must agree with the subject under one set of conditions, but under another set of conditions it cannot agree at all or only in number.

For the last case there is no "pure" example among the languages considered here. It can only be illustrated by one of the three groups of Evenki converbs. The first group includes five same-subject converbs (*-na*, *-ksa*, *-mi*, *-mnak*, *-mnen*), which optionally agree with the subject only in number by means of the ending *-l* (used also to form the plural of nouns and participles). The second group consists of two different-subject converbs (*-rak* and *-nma*), which always agree with their subject (cf. Konstantinova 1953: 108–110). And, finally, the last group, comprising eight varying-subject converbs (*-čala*, *-dala*, *-nasi*, *-da*, *-kenan*, *-ketawa*, *-wuna*, *-deli*), agrees in person and number with the subject in the different-subject use, but only in number in the same-subject use (suffixes *-wi* for singular and *-wer* for plural; cf. examples [39] and [40]).

15. Seven main types of agreement of the converb with the subject

We distinguish the following seven types: specific, zero, adjectival, verbal, possessive, possessive-verbal and mixed. The following three main cases of agreement exist: (1) agreement of the predicate (especially the nominal predicate) with the

subject in an independent clause (see below – the *verbal* type of agreement); (2) agreement of the attribute expressed by an adjective or a participle with its head, as, for instance, in several Indo-European languages (the *adjectival* type of agreement); (3) agreement of the noun with its possessor (the *possessive* type of agreement). The converb can agree with the subject (and more rarely with the object or other arguments) in one of these three ways (coinciding with them completely or approaching them more or less), or, rarely, in a specific way (the *specific* type of agreement). Often there is no agreement at all (*zero* agreement). The possessive agreement can be expressed in the same way as the verbal agreement (*possessive-verbal* agreement). Different converbs in one and the same language can have different types of agreement. One and the same converb can have different types of agreement depending on the same-subject or different-subject use (cf. section 14). In the *mixed* type of agreement one and the same converb can have different types of agreement: some forms agree according to the verbal type, others according to the possessive type, and yet others according to the specific type.

Table 2 illustrates the existence of different types of converb agreement in several languages.

Table 2. Types of converb agreement in several languages

Type of agreement	Language							
	Nivkh	Russian	Lithuanian	Czech	Mongolian	Yakut	Evenki	Eskimo
specific	+	–	–	–	–	–	–	–
zero	+	+	+	–	+	–	(+)	–
adjectival	–	–	+	+	–	–	(–)	–
verbal	–	–	–	–	–	+	–	–
possessive	–	–	–	–	+	–	–	–
possessive-verbal	–	–	–	–	–	–	+	–
mixed	–	–	–	–	–	–	–	+

With verbal and possessive-verbal agreement, the form of the converb is, of course, not different from the form of the finite verb; in the other four cases it differs from the form of the finite verb.

15.1. The specific type of converb agreement

So far this type can only be illustrated with some Nivkh converbs (cf. examples [32 a]). This is probably the rarest type of converb agreement.

Furthermore there are cases where the specific type of agreement affects only part of the forms of one and the same converb. This is the situation, for instance, in Eskimo (cf. section 15.7; Menovščikov 1967: 175).

15.2. The zero type of converb agreement

This agreement type is apparently most widespread. In several languages, for instance in Russian, it goes back to the adjectival type of agreement (see, e.g., Stecenko 1977: 44–45). If there are two or more types of converb agreement in a language, then one of them is most likely zero. See, however, section 15.7.

15.3. The adjectival type of converb agreement

This type can be illustrated by Czech converbs and by Lithuanian same-subject converbs, in particular the so called semi-participles. For example:

- (33) Czech (Havránek–Jedlička 1951: 130–131)
 ‘carrying’: *nesa* masculine singular
 nesouc feminine singular
 nesouce plural (masculine or feminine)
- (34) Lithuanian (Musteikis 1972: 225)
 ‘working’: *dirb-dam-as* masculine singular
 dirb-dam-a feminine singular
 dirb-dam-i masculine plural
 dirb-dam-os feminine plural

This type always seems to go back to participles.

15.3.1. Agreement in number according to the type of participles and nouns

This type, which is not yet very clear, can be illustrated by Evenki same-subject converbs which agree only in number (some of them optionally), as in:

- (35) Evenki (Konstantinova 1964: 207)
- a. *eme-kse* ‘(I, you, s/he) having arrived’
 - b. *eme-kse-l* ‘(we, you-all, they) having arrived’
 [cf. *eme-* ‘arrive’ → *eme-če* ‘(one) having arrived (participle)’
eme- ‘arrive’ → *eme-če-l* ‘(ones) having arrived’
gule ‘house’ → *gule-l* ‘houses’]

15.4. The verbal type of converb agreement

This type is represented by those Yakut converbs whose conjugation coincides with the conjugation which apparently goes back to the agreement of the nominal predicate with the subject (the converb agreement does not coincide with

the second, possessive type of verbal agreement, not counting the fact that two of the six forms of the finite verb, the first and second plural forms, are identical in the verbal and possessive conjugation). The following example shows person forms of the *-bakka*-converb of the verb *bar*- 'go'.

- (36) Yakut (Korkina 1985: 16)
- a. *Min bar-bakka-byn* ...
I go-CONV-1SG
'(I) not going away ...'
 - b. *Min bara-byn*.
'I am going away.'
 - c. *Bibigi bar-bakka-byt* ...
we go-CONV-1PL
'(we) not going away ...'
 - d. *Bibigi bara-byt*.
'We are going away.'

Compare the nominal predicate:

- (36) e. *Min kibi-bin*.
I person-1SG
'I am a human being.'

An example of the possessive-type conjugation is:

- (36) f. *Min bar-bat-ym*.
'I went away.'
[cf. *mas* 'tree' → *mab-ym* 'my tree']

This type of converb apparently goes back to participles most of the time.

15.5. The possessive type of converb agreement

There are two subtypes here.

15.5.1. Agreement according to the type of the personal (i. e., nonreflexive) possessive markers (with the meanings 'my', 'your', 'his/her', etc.)

This is the situation, for instance, in a group of Mongolian and Buryat varying-subject converbs (the Mongolian finite verb does not agree with the subject, the Buryat finite verb does). For example:

- (37) Buryat (Skribnik 1986 a: 166–167)
- a. *Iše tüše güj-höör baj-tar-ni draga-mnaj xelty-šoо*.
here there run-CONV be-CONV-1SG dredger-1PL ?-PAST
'While I was running back and forth, our dredger took a list.'
[cf. *ger-ni* 'my yourta']

- b. *Teren-ej ger-tee oro-žo, xojor-gurban ajaga saj*
 that-DAT house-DAT enter-CONV two-three cup tea
gudam>ɟ-ad gara-xalaar-ni gazaani nege xün morinboo
 drink-CONV go.out-CONV-3SG courtyard one man horse-ABL
buu-ža baj-ba.
 get.off-CONV be-PAST
 'Having entered the house, having drunk two or three cups of tea,
 he just went out when someone got off the horse in the courtyard.'

This type of converb apparently goes back to gerunds or to participle-gerunds in most cases, where the subject was expressed as an attribute, i. e., by a possessive marker.

15.5.2. *Agreement according to the type of reflexive possessive markers*
 (with the meaning 'self's')

This type is represented, for example, by the same-subject use of varying-subject converbs in Buryat and Evenki. Buryat has one marker *-aa* for both numbers, while Evenki has the marker *-wi* for the singular and the marker *-wer* for the plural.

- (38) Buryat (Skribnik 1986 a: 166)
Bütedmaa teren-iije tani-xalaar-aa bajaranla-ša-ba.
 Bütedma that-ACC recognize-CONV-POSS become.happy-?-PAST
 'Bütedma, having recognized him, was happy.'
 [cf. *ger-ee* 'self's yourta']
- (39) Evenki
- a. *Bira-lüi ɣene-dže-ɣesi-wi, bi dʒaw-wa iče-če-w.*
 river-PROL go-IMPF-CONV-POSS.SG I boat-ACC see-PAST-1SG
 'When I was going along the river, I saw a boat.'
 [cf. *gule-wi* 'self's house']
- b. *Bira-lüi ɣene-dže-ɣesi-wer, bu dʒaw-wa iče-če-wun.*
 river-PROL go-IMPF-CONV-POSS.PL we boat-ACC see-PAST-1PL
 'When we were going along the river, we saw a boat.'
 [cf. *gule-wer* 'selves' house']
- c. *Nuɣar-tyn bira-lüi ɣene-dže-ɣesi-tyn, nuɣan dʒaw-wa*
 they river-PROL go-IMPF-CONV-3PL he boat-ACC
iče-če-n.
 see-PAST-3SG
 'When they were going along the river, he saw a boat.'
 [-tyn is the third person plural suffix]

Examples (39 a) and (39 b) show a same-subject use of the converb, and (39 c) shows a different-subject use.

15.6. The possessive-verbal type of converb agreement

This can be illustrated by Evenki different-subject converbs, and by varying-subject converbs in different-subject uses. In Evenki there are two types of agreement of the finite verb, and the converb agreement is identical to only one of them.

- (40) Evenki (cf. Konstantinova 1964: 170–180, 213–227)
baka-čaa-w ‘I found’ *baka-čalaa-w* ‘after I found’
baka-čaa-s ‘you found’ *baka-čalaa-s* ‘after you found’, etc.
 [-čaa: past tense suffix; -čalaa: anterior converb suffix]
 Compare, in nouns:
džu-w ‘my house’
džu-s ‘your house’, etc.
 Another type of agreement in finite verbs, which is not used in converbs is:
baka-m ‘I found’
baka-nni ‘you found’, etc.

This type of converb apparently goes back mostly to gerunds or to participle-gerunds.

15.7. The mixed type of converb agreement

This curious type of agreement can be illustrated with examples of Eskimo converbs. They have more agreement forms than finite verbs in the indicative. Thus, intransitive finite verbs have nine personal forms (first, second and third person singular, dual, and plural), whereas the converb has twelve forms: it has three additional forms with a reflexive third person subject in the three numbers (cf. sections 12.2.1 and 12.3.2). Transitive finite verbs and converbs have 42 and 60 agreement forms, respectively (the converb has eighteen additional forms with a reflexive third person subject) (cf. Menovščikov 1967: 84, 88, 141, 149, 150, 151, 175, 176). Since some personal forms of the finite verb often correspond to two to four unambiguous personal forms (thus, in examples (41) and (42) the ending *-ŋa* of the first person singular of the finite verb has four corresponding endings in four converbs: *-ŋa*, *-ma*, *-mni*, and *-ka*; it is significant that in converbs in *-lu* and in *-ja*, there is not a single [completely] coinciding form among the twelve intransitive personal forms; cf. Menovščikov 1967: 141, 149), the number of personal forms in the intransitive and transitive conjugation of converbs amounts to no less than 35 and 75, respectively. For example:

- (41) Eskimo (Menovščikov–Vaxtin 1983: 141–158)
- a. *nykyv-aq-u-ŋa*
rise-CONT-CONJUG-1SG
'I am rising'
 - b. *nykyv-lu-ŋa ...*
rise-CONV-1SG
'(I) having risen'
[converb of accompanying action: here the endings of the converb
and the finite verb are identical]

but:

- (42) Eskimo
- a. *nykyv-umaŋ-ma*
rise-CONV-1SG
'when I was rising'
[simultaneous converb]
 - b. *nykyv-ny-mni*
rise-CONV-1SG
'when I rise'
 - c. *nykyv-kaŋut-ka*
rise-CONV-1SG
'as soon as I rose'
[converb of immediate anteriority]

The agreement markers in converbs can be identical with (and go back to?):

1. only the finite verb markers in the indicative (cf. *unit-aq-a-xpy-kuŋ* [leave-CONT-CONJUG-2SG-1DL] 'you are leaving the two of us' – *tagis-ja-fsi-kuŋ* [bring-CONV-2PL-1DL] 'when you-all brought the two of us'; Menovščikov 1967: 88, 150);
2. only the finite verb markers in the nonindicative, e. g., in the imperative (cf. *aglati-gu* 'lead him' – *tagit-aqna-w-gu* [bring-CONV-2SG-3SG] 'when you were leading him');
3. completely identical only with the marker of personal possession in some case (cf. example [42 a] and *pana-ma* 'of my spear' [genitive]);
4. only with the marker of reflexive possession in some case (cf. example [28 b] and *pana-mi-ni* 'on self's spear' [locative]);
5. the finite verb markers and the "ending" of the personal pronoun (cf. example [28 a] and *xua-ŋa* 'I');
6. the markers of finite verbs and personal possession (cf. *pana-nka* 'my spears', *aglat-aqa-nka* 'I lead them', *aglat-qaŋuty-nka* 'as soon as I lead them');

7. only the truncated form of the personal pronoun and the markers of personal possession (cf. *l-pyk* 'you', *anjax-pyk* 'of your canoe' [genitive], *tagi-mač-pyk* '[you] coming');
8. the finite verb marker in the imperative, the truncated form of the personal pronoun, and the marker of personal possession (cf. *l-kyk-* 'the two of them', *aglati-kyk* 'lead the two of them', *pana-kyk* 'his two spears');
9. the personal pronoun, the marker of personal possession, and the finite verb marker in the indicative (*pysi* 'you-all', *anjax-pysi* 'of you-all's canoe', *unitaqax-pysi-kut* [leave-you.all-we] 'you-all are leaving us', *tagi-nyč-pysi* 'after you-all come');
10. they can be specific (cf. the highlighted elements in the following forms: *tagi-nyč-mygni* 'after the two of them come', *aglaty-ğna-mini-xy-kun* 'although they led the two of us', *pajity-ğna-tni* 'although they met him'—Menovščikov 1967: 88, 112, 153, 155, 156, 159, 160, 168, 171, 175, 176, 182).

16. Four main types of expressing the converb subject in different-subject constructions

These are the main types of expressing the converb subject: (1) the converb subject has the same form as the subject of the superordinate verb, i.e., we are dealing with a canonical subject (cf. examples [3], [39 c], etc.); (2) the converb subject is expressed in an oblique case—the dative (cf. example [29 b]), the genitive (cf. examples [24] and [37 b]), and others (cf. example [32 c]); (3) the converb subject is expressed in the possessive form; (4) the converb subject cannot be expressed at all (cf. example [27]).

There can be structural restrictions on the expression of the subject. Thus, for example, in Estonian (where it is mainly intransitives that occur as converbs, Uuspõld 1967: 12) transitive verbs in converb position cannot be used with an explicit subject when the direct object is expressed (Uuspõld 1967: 12).

Different converbs of one and the same language can express the subject differently, and one and the same converb can express the subject in two different ways (cf. example [32 c]). Thus, for instance, the Buryat converb in *-bašje* can have its subject both in the indefinite case and in the genitive case. Moreover, if the ending of the Buryat "adverbial" converb already indicates a subject of the first or second person, naming the subject becomes redundant and it is usually not expressed. But if the subject is lexically expressed, then its grammatical expression by means of agreement markers in several converbs becomes redundant. The simultaneous use of both expression types usually serves to emphasize the subject (cf. Skribnik 1986 b: 90; 1986 a: 165).

17. Four main temporal types of converbs, by dependence on a finite verb in a certain temporal form

Most often converbs have only the relative-temporal meanings of simultaneity, precedence, etc., i. e., they denote the event time relative to the absolute time as expressed by the finite verb. But there are also converbs whose form is linked to a finite verb in a certain temporal form. Thus, it appears that such converbs have not only relative, but also absolute temporal meaning. This parameter allows us to distinguish four types of converbs, each of which has two subtypes – a nonderived one and a derived one – depending on whether the absolute-temporal converb has a corresponding temporally neutral converb (or a converb with non-future tense meaning) with a morphologically similar (in particular basic) converb marker.

Depending on the way in which the converb is linked to the finite verb in a certain temporal form, two groups of converbs are distinguished: (1) the converb expresses absolute temporal meaning (converbs of group A); and (2) the converb does not express absolute time, but the linking to a certain temporal form of the finite verb is connected with the meaning of habituality, condition, etc. (converbs of group B).

17.1. Temporally neutral converbs

As has been noted above, this type is predominant in the languages considered here. These converbs can be dependent on a finite verb in any temporal form.

17.1.1. Nonderived converbs

An example is:

- (43) Russian
 Pridja, on leg/ ložitsja/ ljažet.
 come:PFV.CONV he lay.down lies.down will:lie.down
 ‘Having come, he lay down/is lying down/will lie down.’

There are apparently only aspectual restrictions here, as shown in example (44). Sentence (44 a) is impossible because the imperfective converb is interpreted iteratively, whereas the finite verb denotes a single action. In (44 b), by contrast, both verb forms denote iterative actions.

- (44) Russian
 a. **Prixodja, on leg.*
 come:IMPF.CONV he lay.down
 ‘Coming [imperfective], he lay down [perfective].’

- b. *Prixodja, on ložiłsja.*
 come:IMPF.CONV he lay.down
 'Coming [imperfective], he lay down (repeatedly) [imperfective].'

Only few Russian converbs have temporal restrictions. Thus, the converb *znav* 'having known' seems to demand a finite verb in the past tense.

17.1.2. Derived converbs

No examples.

17.2. Presential converbs

This type of converbs is only combined with finite verbs in the present tense.

17.2.1. Nonderived converbs

This type can be illustrated by Eskimo converbs of precedence in *-nġ-/ny(ġ)-*. They are linked to a finite verb in the present tense and denote "habituality or indefinite duration of the event" (Menovščikov 1967: 152). Here the converb belongs to group B: the "habituality or indefinite duration" of the event in the subordinate part of the sentence normally presupposes the present tense (also in the habitual sense, of course) in the main part. For example:

- (45) Eskimo
Qava-ny-špyni qypxag-jaġ-aq-u-ŋa ulimavig-mun.
 sleep-CONV-2SG work-GO.TO-CONT-CONJUG-1SG workshop-DAT
 'After you fall asleep, I go into the workshop to work.'

17.2.2. Derived converbs

No examples.

17.3. Preterital converbs

This type of converbs is only combined with finite verbs in the present tense.

17.3.1. Nonderived converbs

This type can be illustrated by the Eskimo converb of precedence in *-ja/-sja-* (a converb of group A), for example:

- (46) Eskimo (Menovščikov 1967: 147–149)
Tagi-ja-vyk, qypxa-ma-ŋa ulimavig-mi.
 come-CONV-2SG work-PAST-1SG workshop-LOC
 'When you came I was working in the workshop.'
 [cf. examples (41 and (46)]

Here one can also mention the Eskimo counterfactual conditional converbs in *-majaqu-/-kajaqu-*, which combine only with finite verbs in a past tense or a subjunctive mood form (Menovščikov–Vaxtin 1983: 155). These are converbs of group B.

The Evenki converb in *-nasi-* is always used with a past finite verb, for instance:

- (47) Evenki (Konstantinova 1953: 111)
Beje-l ollomi-dža-nasi-tyñ bu oro-r-wor
 man-PL fish-IMPF-CONV-3PL we deer-PL-POSS.PL
etejetče-lđi-wun.
 guard-SOC-NONFUT-1PL
 ‘While the men were fishing, we were guarding the reindeer.’

17.3.2. *Derived converbs*

This type can be illustrated by Korean examples. The Korean converb in *-myense* denotes simultaneity and is temporally neutral (Račkov 1958: 84–86), but the converb in *-yes-su-myense*, i. e., the converb with the suffix of the past tense, “is used exclusively in combination with past-tense verbs”, i. e., “it denotes absolute past tense” (Račkov 1958: 89). For example:

- (48) Korean (Račkov 1958: 89)
Cwungkwuk-uy conthap-ul mopangha-yessu-myense
 China-GEN pagoda-ACC copy-PAST-CONV
piektol taysin-ey tor-ul sayongha-yess-ki ttaymun-ey ...
 brick instead-DAT stone-ACC use-PAST-INF therefore-DAT
 ‘Copying (lit. ‘They copied and ...’) the Chinese pagodas, they used stone instead of brick, therefore ...’

In this respect the Korean facts appear to be particularly interesting, because most Korean converbs can be combined with tense suffixes (Račkov 1958: 44).

17.4. *Futurate converbs*

These converbs are combined only with finite verbs in the future tense, and also with imperative and subjunctive verb forms.

17.4.1. *Nonderived converbs*

This type is illustrated in (49) and (50) by the Eskimo conditional-temporal converb in *-qu-/-ku-*, *-qa-/-ka-*, and the Nivkh conditional converb in *-ba(ji)/-aq(ji)*. (Both are converbs of group B.)

(49) Eskimo (Menovščikov–Vaxtin 1983: 154–155)

- a. *Agla-qu-ni, atixtuḡ-naḡ-t-u-q.*
 go-CONV-3SG.SS read-FUT-SUF-CONJUG-3SG
 'If he goes, he will read.'
- b. *Agla-qa-n, atixtuḡ-naḡ-t-u-ḡa.*
 go-CONV-3SG.DS read-FUT-SUF-CONJUG-1SG
 'If he goes, I will read.' (cf. 31)

(50) Nivkh (Panfilov 1965: 125–126)

- či kər-va ni č-ar-na-d'-ra.*
 you hungry-CONV I you-feed-FUT-FIN
 'If you are hungry, I will feed you.'

The converb in *-tot* in the East Sakhalin dialect of Nivkh is really used in an absolute past tense (and not nonfuture) – see example (51 a).

17.4.2. Derived converbs

The following example is from the East Sakhalin dialect of Nivkh. Here three converbs have the forms *-r/-t*, *-ror/-tot*, and *-ra/-ta* in the non-future tense (the forms in *-r* for the second and third person singular, the forms in *-t* for the first person singular and all plural persons, cf. example [32]), and the forms *-r/-n*, *-ror/-non*, and *-ra/-na* in the future tense (Krejnovič 1979: 318). For example:

(51) Nivkh (Otaina 1978: 102)

- a. *ni čo xu-tot p'-vo-roḡ vi-d'.*
 I fish catch-CONV self's-house-DAT go-FIN
 'I, having caught fish, went home.'
- b. *ni čo xu-non p'-vo-roḡ vi-j-d'.*
 I fish catch-CONV self's-house-DAT go-FUT-FIN
 'I, having caught fish, will go home.'

Futurate converbs exist also in Czech. Here along with the so-called present tense converb (as in *nesa* 'carrying') and the past tense converb (as in *přines* 'having brought'), which roughly correspond to the Russian converbs *nesja* (present tense converb from imperfective verbs) and *přinesši* (past tense converb of perfective verbs), i. e., they are temporally neutral, there are also so-called future tense converbs as in *přinesa*, which morphologically correspond to Russian converbs like *přinesja* (present tense converb from perfective verbs). The Czech futurate converbs denote events that precede a future event, they are linked to a finite verb in the future, imperative, or conditional. At present these converbs sound archaic and are practically not used, having been replaced by past tense converbs (cf. Oktábec 1953: 261), for example:

- (52) Czech (Trávníček 1951: 1423–1424; Havránek–Jedlička 1951: 129)
Přijda domu hned to vyhledám.
 come:CONV home at.once it look:1SG
 ‘Coming home, I will immediately look for it.’

18. Narrative and contextual converbs and quasi-converbs in the languages of Eurasia:

A brief areal description of their use

This section is mainly based on data from the book by Colin Masica (Masica 1976: 108–140), where it is maintained that in the languages investigated, going from east to west, the role of converbs in the grammatical system diminishes (the eastern zone is bigger and contains more languages). Furthermore, the intensity of use of the converbs also decreases (on average, converbs are at least as frequent in the eastern languages as in the western languages; cf. Table 3, where the Estonian data have been added by the present author). The intensity of use of converbs is also liable to change in different periods in one and the same language, as can be seen in the data from Ancient and Modern Greek (cf. Table 3).

Table 3. Number of converbs in different languages (in the first nine chapters of the Gospel according to Mark)

0– 50	German	0
	Estonian	2
	Modern Greek	5
	Rumanian	36
50–100	English	58
	French	99
100–200	Russian	133
	Italian	150
	Spanish	162
	Turkish	181
200–300	Persian	205
	Hindi	217
	Ancient Greek	226
	Bengali	250
>300	Malayalam	446
	Telugu	459

The main temporal features of converbs also change considerably along the east-west axis. As the frequency of use decreases in the western direction (though not in every single language), the predominance of the simultaneous converb (present participle, in Masica's terms) over the anterior converb (past participle) increases, cf. Table 4.

Table 4. Correlation between simultaneous and anterior converbs in different languages

Language	Simultaneous converb	Anterior converb
German	0	0
Estonian	2	0
Modern Greek	5	0
Rumanian	36	0
English	58	0
French	57	42
Italian	87	63
Spanish	152	10
Russian	35	98
Ancient Greek	84	142
Turkish	28	153
Persian	3	202
Hindi	31	186
Telugu	30	429
Bengali	4	246
Malayalam	0	446

One of the main reasons for this divergence in the use of simultaneous and anterior converbs is probably the fact that in the eastern languages the narrative converbs predominate, i. e., converbs that naturally function with anterior meaning, while in the western languages there are only contextual converbs. In these languages the simultaneous converbs fulfill several functions that are typical for anterior converbs. Simultaneous converbs can be used instead of anterior converbs in the following cases:

1. when the simultaneous converb expresses an action that immediately precedes the action denoted by the finite form. This has been noted, for instance, for English (Gordon-Krylova 1974: 148) and Estonian (Uuspõld 1967: 10). For example:

- (53) a. Estonian
Korter-isse tul-les ma lülita-s-in raadio sisse.
 flat-ILL.SG come-CONV I switch-PAST-1SG radio:ACC in
 'Entering the room I switched on the radio.'

b. English

Entering the room I switched on the radio.

2. when the anterior converb denotes not the event itself, but the result of the event that persists at the time of the finite verb's event. Thus, for instance, in the following sentence, the Ancient Greek original shows an anterior converb (*participium aoristi*).

(54) Ancient Greek (Mark 1: 7)

... *hoũ ouk ei-mi bikanòs kúp-sa-s lū-sai tòn*
 whose not be-1SG worthy stoop-AOR-PTCP unloose-INF the
himánt-a tōn hypodēmát-ōn autoũ.
 latchet-ACC the shoe-GEN:PL his

'... the latchet of whose shoes I am not worthy to stoop down and unloose.' (lit. '... having stooped down, unloose.')

The Russian translation is similar to the original (it contains the converb *naklonivšis* 'formed from a perfective aspect verb), whereas in the translations of the Gospel into Estonian and Latin simultaneous converbs are used: Estonian *kummarda-des* 'stooping down' (the past participle **kummarda-nud* 'having stooped down' is impossible here); Latin *procumbens* (*participium praesentis activi*).

It should be added that there is a change of dominant basic word order from SVO to SOV from west to east. Verb-final languages are characterized by medial nonfinite forms. These languages show a greater tendency for narrative functions to be fulfilled by nonfinite forms (in particular, converbs) than languages with a different word order.

19. Some typological generalizations

19.1. The correlation between combined and noncombined types of converbs and the character of their temporal meaning

Contextual converbs with the fundamental meaning of simultaneity appear to show a greater tendency toward formal detachment from other verb forms than converbs with the fundamental meaning of precedence. In other words, the meaning of simultaneity is more often expressed by noncombined converbs than the meaning of precedence. In the latter case, combination with the function of past participle is widespread. This is the situation, for instance, in Estonian (cf. examples [12] and [13]). A more or less similar picture can be found in Lithuanian (the so-called semi-participles in *-dam-* and the adverbial participles, see

section 9.3; cf. Ambrazas 1985: 298, 312–313), French (*gérondif* and *participe passé*, cf. Gak 1986: 262–265), Chechen (converb in *-ř* and past participles in *-na*, cf. Dešeriev 1967: 204), cf. Čeremisina 1986 b: 38–39.

19.2. The implicative correlation of the fundamental temporal meaning of converbs

If a language has a converb with the fundamental meaning of succession, then it has also a converb with the fundamental meaning of precedence. The existence of the latter usually also presupposes the existence of a converb with the fundamental meaning of simultaneity.

19.3. Narrative and specialized converbs

The parameters (A) “existence of narrative converbs” and (B) “productivity of specialized converbs” (the existence of no less than ten such forms) are independent. By these parameters languages are subdivided into four types: (1) A and B (Nivkh and Korean); (2) A but not B (Tamil and Hindi); (3) B but not A (Chukchi and Evenki); (4) neither A nor B (Russian and Estonian).

Abbreviations

ABL	ablative case	GEN	genitive case
ABS	absolutive case	ILL	illative
ACC	accusative case	INF	infinitive
AUX	auxiliary verb	INSTR	instrumental case
CAUS	causative	INTCONV	internal converb
CONC	concessive	LOC	locative case
CONJUG	conjugation class suffix	PART	partitive
CONT	continuative	PAST	past tense
CONV	converb	PF	perfective
DAT	dative case	PL	plural
DS	different subject	POSS	possessive
DUR	durative	PRES	present tense
EMPH	emphatic	PROL	prolative
ERG	ergative case	PTCP	participle
F	feminine	SG	singular
FIN	finiteness	SS	same subject
FUT	future tense	SOC	sociative

Notes

- * Translated from: Nedjalkov, Vladimir P. "Osnovnye tipy deepričastij", in: Viktor S. Xrakovskij (ed.), *Tipologija i grammatika*. Moscow: Nauka, Glavnaja redakcija vostočnoj literatury, 36–59. The author is grateful to Sergej E. Jaxontov, Maria S. Polinsky, Elena K. Skribnik, Nikolaj B. Vaxtin, and Viktor S. Xrakovskij for critical remarks on the first variant of this article, and to Bernard Comrie, Martin Haspelmath, and Ekkehard König for help with the preparation of the English version.
1. *Gerund* is used here in its Latin and English sense, not in its Romance sense (Romance "gerunds" are converbs).

References

- Ambrasas, Vytautas
1985 "Nesprjagaemye formy glagola" [Noninflected verb forms], in: Vytautas Ambrasas (ed.) *Grammatika litovskogo jazyka*. [Lithuanian grammar]. Vilnius: Mokslas, 290–326.
- Apresjan, Jurij D.
1983 "O strukture značenij jazykovyx edinic" [On the structure of meanings of linguistic units], in: Teresa Dobrzyńska–Elżbieta Janus (eds.) 1983. *Tekst i zdanie: zbiór studiów*. [Text and sentence: a collection of studies]. Wrocław: Wydawnictwo Polskiej Akademii Nauk, 313–339.
- Bertagaev, Trofim A.
1964 *Sintaksis sovremennogo mongol'skogo jazyka v sravnitel'nom osveščenii. Prostoje predloženie*. [The syntax of modern Mongolian in comparative perspective: The simple sentence]. Moskva: Nauka.
- Bobrovnikov, Aleksej A.
1849 *Grammatika mongol'sko-kalmyckogo jazyka*. [Grammar of the Mongolian-Kalmyk language]. Kazan'.
- Boguslavskij, Igor' M.
1977 "O semantičeskom opisanii russkix deepričastij: neopredelennost' ili mnogoznačnosť?" [On the semantic description of Russian converbs: Vagueness or polysemy?] *Izvestija AN SSSR, Serija literatury i jazyka* 1977(3): 270–281.
- Borkovskij, Viktor I.—Petr S. Kuznecov
1965 *Istoričeskaja grammatika russkogo jazyka*. [Historical grammar of Russian]. Moskva: Nauka.
- Brodskaja, Larisa M.
1980 "Pričastnye i deepričastnye konstrukcii v sostave složnopolčinennogo predloženia" [Participial and converbal constructions within the subordinate sentence], in: Čeremisina 1980 b.
- Čeremisina, Majja I.
1977 "Deepričastie kak klass form glagola v jazykax raznyx sistem" [The converb as a class of verb forms in structurally diverse languages], in: Čeremisina, Majja I. (ed.), *Složnoe predloženie v jazykax raznyx sistem*. [The complex sentence in structurally diverse languages]. Novosibirsk: Sibirskoe otdelenie AN SSSR, 3–28.

- 1979 *Nekotorye voprosy teorii složnogo predloženiya*. [Some questions of the theory of the complex sentence] Novosibirsk: Novosibirskij gosudarstvennyj universitet.
- 1980 a "Monosub"ektnaja konstrukcija: Ponjatie i tipologija" [Same-subject construction: The concept and a typology], in: Čeremisina, Majja I. (ed.), 1980 b.
- 1980 b *Infinitnye formy glagola*. [Nonfinite verb forms] Novosibirsk: Sibirskoe otdelenie AN SSSR.
- 1980 c *Polipredikativnye konstrukcii i ix morfoložičeskaja baza*. [Multipredicate constructions and their morphological basis] Novosibirsk: Nauka.
- 1986 a "Obščij podxod k strukturnoj tipologii polipredikativnyx konstrukcij" [A general approach to the structural typology of multi-predicate constructions], in: Ubrjatova–Litvin (eds.) 1986: 9–32.
- 1986 b "Obščee predstavlenie o tipax infinitnyx predikatov" [A general view of types of nonfinite predicates], in: Ubrjatova–Litvin (eds.) 1986: 33–66.
- Čeremisina, Majja I.–Ljudmila A. Šamina
- 1986 "Konstrukcii s deepričastnoj zavisimoj čast'ju v tjurkskix jazykax Južnoj Sibiri" [Constructions with a converbal dependent in the Turkic languages of South Siberia], in: Ubrjatova–Litvin (eds.) 1986: 144–158.
- Čkadua, L. P.
- 1970 *Sistema vremen i osnovnyx modal'nyx obrazovanij v abxaz-abažinskix dialektax*. [The system of tenses and the main modal formations in the Abkhaz-Abaza dialects] Tbilisi: Mecniereba.
- Dešeriev, Junus D.
- 1967 "Čečenskij jazyk" [The Chechen language], in: E. A. Bokarev–K. V. Lomtatidze (eds.) *Jazyki Narodov SSSR. T. IV. Iberijsko-kavkazskie jazyki*. [Languages of the peoples of the USSR. Vol. IV. Ibero-Caucasian languages] Moskva: Nauka, 190–209.
- Dmitriev, Nikolaj K.
- 1962 *Stroj tjurkskix jazykov*. [The structure of the Turkic languages] Moskva: Izdatel'stvo Akademii Nauk.
- Džanmavov, Jusup D.
- 1967 *Deepričastija v kumyjskom literaturnom jazyke (sравnitel'no s drugimi tjurkskimi jazykami)*. [Converbs in standard Kumyk (in comparison with other Turkic languages)] Moskva: Nauka.
- Efremov, Nikolaj N.
- 1980 "O parnosti monosub"ektnyx i raznosub"ektnyx jakutskix temporal'nyx polipredikativnyx konstrukcij" [On the pairedness of same-subject and different-subject temporal multipredicate constructions in Yakut], in: Čeremisina (ed.) 1980 a.
- Filipović, Nada
- 1977 *Die Partizipialkonstruktionen in der deutschen dichterischen Prosa von heute*. (Forschungsberichte des Instituts für deutsche Sprache Mannheim, 32.) Tübingen: Narr.
- Gak, Vladimir G.
- 1986 *Teoretičeskaja grammatika francuzskogo jazyka. Morfoložija*. [Theoretical grammar of French: Morphology] Moskva: Vysšaja škola.
- Gordon, Elena M.–Inna P. Krylova
- 1974 *A grammar of present-day English (parts of speech)*. Moscow: Meždunarodnye otnošenija.
- Gorelova, Lilija M.
- 1980 a "Funkcii evenkijskix pričastij i ix otnošenija k deepričastijam" [Functions of Evenki participles and their relations to converbs], in: Čeremisina (ed.) 1980 a.

- 1980 b "Modeli polipredikativnyx konstrukcij v evenkijskom jazyke" [Models of multipredicate constructions in Evenki], in: Čeremisina (ed.) 1980 b.
- 1980 c "O semantičeskix sootvetstvijax meždu prostymi i složnymi deepričastijami v evenkijskom jazyke" [On semantic correlations between simple and complex converbs in Evenki], in: Čeremisina, Majja I. (ed.), *Podčinenie v polipredikativnyx konstrukcijax*. [Subordination in multi-predicate constructions] Novosibirsk: Sibirskoe otdelenie AN SSSR.
- Havránek, Bohuslav–Alois Jedlička
1951 *Česká mluvnice: Základní jazyková příručka*. [Czech grammar: Basic language handbook] Praha: Slovanské Nakladatelství.
- Isanbaev, Nikolaj I.
1961 *Deepričastija v marijskom jazyke*. [Converbs in Mari] Joškar-Ola.
- Jakobson, Roman
1957 "Shifters, verbal categories, and the Russian verb", in: *Selected writings, Vol. 2: Word and language*. The Hague: Mouton, 130–147.
- Juldašev, Axnef A.
1977 *Sootnošenie deepričastnyx i ličnyx form glagola v tjurkskix jazykax*. [The relation between converbal and personal verb forms in Turkic languages] Moskva: Nauka.
- Kalečtaca, Milo
1978 *Lessons in Hopi*. Tucson: University of Arizona Press.
- Kaušanskaja, Valentina L.–Revečka L. Kovner–Ol'ga N. Koževnikova–Elena V. Prokof'eva–Zinaida M. Rajnes–Sarra V. Skvirskaja–Frida–Debora Ja. Cyrlina
1959 *Grammatika anglijskogo jazyka*. [Grammar of English] Leningrad: Učpedgiz.
- Kibrik, Aleksandr E. et al.
1977 *Opyt strukturnogo opisanija arčinskogo jazyka. Vol. II. Taksonomičeskaja grammatika*. [Attempt at a structural description of Archi: Vol. 2. Taxonomic grammar] Moskva: Izdatel'stvo Moskovskogo universiteta.
- Kononov, Andrej N.
1960 *Grammatika sovremennogo uzbekskogo literaturnogo jazyka*. [Grammar of standard modern Uzbek] Moskva & Leningrad: Izdatel'stvo Akademii Nauk.
- Konstantinova, Ol'ga A.
1953 "Deepričastija v evenkijskom jazyke" [Converbs in Evenki], in: A. Gorcevskij (ed.) *V pomošč' učitelju škol Krajnego Severa, Vyp. 4*. [Helping the teachers of schools of the Extreme North] Moskva/Leningrad.
- 1964 *Evenkijskij jazyk. Fonetika. Morfologija*. [Evenki: Phonology, Morphology] Moskva/Leningrad: Učpedgiz.
- Korkina, Evdokia I.
1985 *Deepričastija v jakutskom jazyke*. [Converbs in Yakut] Novosibirsk: Nauka.
- Kovtunova, Irina I.
1964 "Izmenenija v oblasti deepričastnyx oborotov" [Changes in the area of converbal constructions], in: Viktor V. Vinogradov–Natal'ja Ju. Švedova (eds) 1964. *Izmenenija v sisteme prostogo i složennogo predloženiya v russkom literaturnom jazyke XIX veka*. [Changes in the system of the simple and the complex sentence in standard Russian of the nineteenth century] Moskva: Nauka.
- Krasil'nikova, Elena V.
1973 "Obrazovaniya na -a (-ja), -u, -(v)ši(s') v razgovornoj reči" [Formations in -a (-ja), -u, -(v)ši(s') in the colloquial language], in: Elena A. Zemskaja (ed.) 1973. *Russkaja razgovornaja reč'*. [Russian colloquial speech] Moskva: Nauka.

- Krejnovič, Eruxim A.
1979 "Jukagirskij jazyk" [The Yukagir language], in: Garma D. Sanžeev et al. (eds.) *Jazyki Azii i Afriki*. T. III. [Languages of Asia and Africa. Vol. 30] Moskva: Nauka.
- Kudrjavskij, Dmitrij N.
1916 "Iz istorii russkix deepričastij. Vyp. 1. Deepričastija prošedšego vremeni" [From the history of Russian converbs. Issue 1. Past tense converbs.] *Učenyje zapiski Imperatorskogo Jur'evskogo universiteta* 1916, 10.
- Masica, Colin P.
1976 *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press.
- Menovščikov, Georgij A.
1967 *Grammatika jazyka aziatskix eskimosov*. Č. 2. [Grammar of the language of Asiatic Eskimos. Part 2.] Leningrad: Nauka.
- Menovščikov, Georgij A.–Nikolaj B. Vaxtin
1983 *Eskimoskij jazyk*. [The Eskimo language] Leningrad: Prosveščenie.
- Musteikis, Kazimiras
1972 *Sopostavitel'naja morfologija russkogo i litovskogo jazykov*. [Contrastive morphology of Russian and Lithuanian] Vilnius: Mintis.
- Nedjalkov, Vladimir P.–Petr I. Inělikej–Vladimir G. Raxtilin
1983 "Čukotskie konstrukcii s sub"ektnym infinitivom" [Chukchi constructions with a subject infinitive], in: Viktor S. Xrakovskij (ed.), *Kategorii glagola i struktura predloženiya: Konstrukcii s predikatnymi aktantami*. [Verbal categories and sentence structure: Constructions with predicate actants] Leningrad: Nauka, 221–234.
- Nedjalkov, Vladimir P.–Otaina, Galina A.
1987 "Tipologičeskie i sopostavitel'nye aspekty zavisimogo taksisa (na materiale nivxskogo jazyka v sopostavlenii s russkim)" [Typological and comparative aspects of dependent taxis (based on Nivkh data compared to Russian)], in: Aleksandr V. Bondarko et al. (eds.) 1987. *Teorija funkcional'noj grammatiki: Vvedenie. Aspektual'nost'. Vremennaja lokalizovannost'. Taksis*. [Theory of functional grammar: Introduction; Aspectuality; Temporal localization; Taxis.] Leningrad: Nauka.
- Oktábec, V.
1953 "O překládání ruských přechodníkových vazeb", in: *Přispěvky k otázkám překládu z ruštiny*. Praha.
- Oswalt, Robert L.
1977 "The causative as a reference-switching mechanism in Western Pomo." *Berkeley Linguistics Society* 3: 46–54.
- Otaina, Galina A.
1978 *Kačestvennyje glagoly v nivxskom jazyke*. [Qualitative verbs in Nivkh] Moskva: Nauka.
- Panfilov, Vladimir Z.
1965 *Grammatika nivxskogo jazyka*. Č. 2. [Grammar of the Nivkh language. Part 2.] Moskva & Leningard: Nauka.
- Peregonceva-Grave, Ljudmila V.
1955 *Datel'nyj samostojatel'nyj v russkom literaturnom jazyke XII–XVII vv.* [The independent dative in standard Russian of the 12th–17th centuries]. Ph.D. dissertation, Leningradskij gosudarstvennyj universitet.
- Perevoščikov, Petr N.
1959 *Deepričastija i deepričastnye konstrukcii v udmurtskom jazyke*. (Converbs and converbal constructions in Udmurt) Iževsk: Udmurtskoe knižnoe izdatel'vo.

- Račkov, Georgij E.
1958 "Vremena deepričastij pervoj i vtoroj grupp v sovremennom korejskom jazyke" [The tenses of converbs of the first and second groups in modern Korean] *Učenyje zapiski Leningradskogo gosudarstvennogo universiteta*, No. 236. Serija vostokovednyx nauk. Vyp. 6. Leningrad.
- Ramstedt, Gustaf John
1939 *A Korean grammar*. Helsinki.
- Sanžeev, Garma D.
1963 *Sravnitel'naja grammatika mongol'skix jazykov. Glagol*. [Comparative grammar of the Mongolian languages] Moskva: Izdatel'stvo vostočnoj literatury.
- Scott, Graham
1978 *The Fore language of Papua New Guinea*. (Pacific Linguistics, series B, 47.) Canberra: Australian National University.
- Skribnik, Elena K.
1986 a "Konstrukcii s deepričastnoj zavisimoj čast'ju v burjatskom jazyke" [Constructions with a converbal dependent in Buryat], in: Ubrjatova–Litvin (eds.) 1986:159–170.
1986 b "Konstrukcii s zavisimymi predikativnymi edinicami, vozglavljaemyimi imennymi formami glagola v burjatskom jazyke" [Constructions with dependent predicative units, headed by nominal verb forms in Buryat], in: Ubrjatova–Litvin (ed.) 1986: 88–111.
- Stecenko, Aleksej N.
1977 *Istoričeskij sintaksis russkogo jazyka*. [Historical syntax of Russian] Moskva: Vysšaja Škola.
- Trávníček, F.
1951 *Mluvnice spisovné češtiny. Část II. Skladba*. [Grammar of written Czech. Part 2: Syntax] Praha: Slovanské Nakladatelství.
- Ubrjatova, Elizaveta I.–Feliks A. Litvin (eds.)
1986 *Strukturnye typy sintetičeskix polipredikativnyx konstrukcij v jazykax raznyx sistem*. [Structural types of synthetic multi-predicate constructions in structurally diverse languages] Novosibirsk: Nauka.
- Uuspöld, Ellen
1967 *Struktura i značenie obšojatel'stvennyx konstrukcij s central'nym slovom – glagol'noj formoj na -des, -mata, -nud (-nuna), -tud (-tuna)*. [Structure and meaning of adverbial constructions headed by a verb form in -des, -mata, -nud (-nuna), -tud (-tuna)] Ph.D. dissertation, Tartu.
- Xolodovič, Aleksandr A.
1954 *Očerki grammatiki korejskogo jazyka*. [Grammatical sketch of Korean] Moskva: Izdatel'stvo literatury na inostrannyx jazykax.
- Yokoyama, Ol'ga
1983 "V zaščitu zapretnyx deepričastij" [In defense of prohibited converbs], in: M. S. Flier (ed.) *American contributions to the Ninth International Congress of Slavists*. Vol. I. Linguistics. Columbus, Ohio, 373–381.
- Zakiev, Mirfatyx Z.
1963 *Sintaksičeskij stroj tatarskogo jazyka*. [The syntactic structure of Tatar] Kazan': Izdatel'stvo kazanskogo universiteta.

Verb serialization and converbs— differences and similarities

Walter Bisang

1. Introduction and summary

The phenomena of verb serialization and converbs are both often discussed in linguistic literature. However, studies comparing these two phenomena and postulating a high degree of similarity between the two of them – as will be the purpose of the present article – are rather rare.

The phenomenon of verb serialization has been observed in several language families like the Kwa languages of West Africa (cf. e.g., Stahlke 1970, Bamgboṣe 1974, Lord 1973, Givón 1975, George 1976, Oyelaran 1982, Awoyale 1987, Déchaine 1990), many languages of East and Southeast Asia (cf. e.g., Matisoff 1969 [on Lahu], Li–Thompson 1973 [on Chinese], Needleman 1973 [on Thai], Clark 1978 [mainly on Vietnamese], Owensby 1986 [on Hmong], Kuhn 1990 [on Vietnamese], Kölver 1991 [on Thai], Bisang 1991, 1992 [on Chinese, Hmong, Vietnamese, Thai, Khmer]), Austronesian languages (cf. e.g., Pawley 1973: 142–147, Bisang 1986 [on Jabêm], Crowley 1987 [on Paamese], Durie 1988), Dravidian languages (cf. Steever 1989), and several Creole languages (cf. e.g., Jansen–Koopman–Muysken 1978, Byrne 1987, Sebba 1987). Discussions of verb serialization in general can be found in Foley–Van Valin 1984, Schiller 1990, and in a stimulating collection of articles edited by Joseph and Zwicky 1990.

The phenomenon of converbs – a term which has the advantage of being neutral – has also been treated under such different labels as “absolute constructions”, “conjunctive participles”, “free adjuncts”, “gerunds”, “adverbial participles”, “sentence equivalents”, or “embedded predications functioning as satellites” (cf. König–van der Auwera 1990: 337; also cf. Masica 1976: 108–140). Since there is a bibliography on the relevant literature on converbs written by Haspelmath at the end of this volume, I shall not make any further bibliographical references to this subject in the present introduction.

The main line of argumentation presented in this article starts from the concept of *asymmetry*: verbs in languages with verb serialization show a high degree of indeterminateness with regard to several categories to be presented in section 3.1. This high degree of indeterminateness prevents serial languages (i.e., languages with verb serialization) from developing a system of asymmetry between

complete [maximum] verbal forms and less complete verbal forms which are vital for converb languages (cf. subsection 5.3). Since the categories affected by indeterminateness in serial languages are expressed mainly morphologically in converb languages, one may also claim that the differences between the two phenomena are mainly morphological. It would, however, be too simplistic to assign the so-called isolating languages to the serial languages, and the agglutinative and inflectional languages to the converb languages. As we shall see from Jabêm (an Austronesian language spoken in Papua New Guinea), the existence of morphology does not exclude the existence of verb serialization – in this particular case, it is morphology itself and its realization within the shape of the verb which does not allow asymmetry to develop (cf. subsection 5.4).

In the context of morphology, there is a third phenomenon apart from verb serialization and converbs which also invites similar treatment, i. e., root serialization (cf. section 6). This phenomenon shows the highest degree of morphological compactness in the way it juxtaposes actions expressed by different verbs.

The rest of this article will be devoted to a further discussion and corroboration of what has been claimed above. For this purpose, I shall first give some typical examples of verb serialization (subsection 2.1) and of converbs (subsection 2.2) in section 2, which also includes a definition of each of the two phenomena. Section 3 will describe verb serialization on the basis of examples from East and Southeast Asian languages (mainly Chinese and Khmer), from Yoruba, and from Jabêm. These examples will be presented in subsection 3.2 within a framework developed from the theoretical background introduced in subsection 3.1. The same framework will also be applied to converb constructions, which will be described in section 4. The languages presented in the context of converbs will be Tamil, Japanese, and Khalkha Mongolian. The fact that verb serialization and converbs can be described within the same framework provides a good standard of comparison and gives impressive evidence of the similarity of the two phenomena. Based upon the material from sections 2 to 4, I shall compare verb serialization and converbs within the framework of four conclusions in section 5. Moreover, I shall very briefly examine verb serialization as a marginal phenomenon in some rather well-known European languages like English and Russian in subsection 5.2. Finally, the last section – i. e., section 6 – will be devoted to root serialization, which will again be presented in the same framework as that applied to verb serialization and converbs.

2. Some typical examples of verb serialization and converbs

2.1. Verb serialization

In this article, the discussion of converbs proceeds from the following definition of verb serialization (cf. Bisang 1991: 509, 1992: 9):

Verb serialization is the unmarked juxtaposition of two or more verbs or verb phrases (with or without subject and/or object), each of which would also be able to form a sentence on its own.

This definition yields the following basic surface structure of verb serialization

I. (NP) V (NP) V (NP) V (NP) V ...

which is typically represented in examples (1) to (4) from Khmer, Vietnamese and Yoruba.

- (1) Khmer
páy kə: kraok laəŋ daə(r) tɿu ly:k tɿək mɿ:əy
 husband thus get.up go.up go/walk lift/raise water one
khtəəb nùb yɔ:k tɿu sraoc ly: sa:ha:y nɿu knoŋ pɿ:əŋ
 bucket DEM take go pour on lover live/be.at in pitcher
nùb slap tɿu.
 DEM die go
 'The husband got up, went away, raised the one bucket of [boiling]
 water and poured it over the lover [of his wife] in the pitcher [where
 he tried to hide] who died.'

Example (1) shows a linear sequence of several events juxtaposed in the chronological order of their occurrence. Moreover, we can see that none of the events is marked for tense, aspect and mood (TAM) and that unmarked change of subject is possible (the subject of *slap tɿu* [i. e., the lover] is not identical with the subject of the other verbal phrases [i. e., the husband]). Finally, some combinations of verbs such as *kraok laəŋ* 'get up', *daə(r) tɿu* 'go/walk away', *yɔ:k tɿu sraoc* 'to take and pour', and *slap tɿu* 'die (away)' belong to a regular syntactic paradigm which will be called *serial unit* in this article (cf. subsection 3.1).

- (2) Vietnamese (Thompson 1965: 231)
muốn biết đư'q'c thua phải đi hỏi.
 want know win lose must go ask
 '[If you] want to know [whether you] won [or] lost [you] have to go ask.'

Unlike example (1), this example is not based on giving a linear sequence of events, but rather on establishing a certain relation, in this case a conditional relation, between only two main events. We may therefore speak of binarity. The semantic quality of the relation established, however, is not necessarily marked, as we can see from the above Vietnamese example, where we can simply observe two juxtaposed strings of verbs, i. e., *muốn biết đù'q'c thua* and *phải đi hỏi*. Furthermore, each of these two strings also contains a governing serial verb construction introduced by the verbs *muốn* 'want' and *biết* 'know' in the first string and *phải* 'must' in the second.

- (3) Yoruba (Akanni 1980: 89)
Lésèkèsè mo taji mo wò ibin mo wo ohun mo rí pé
 suddenly I awake I see here I see there I see say/CONJ
àlà ní mo n-lá.
 dream be I CONT-dream
 'Suddenly, I woke up, looked to the left and to the right and I realized that I was dreaming'.

Like example (1), example (3) shows a linear sequence of events. One should note, however, that the subject (*mo* 'I') is expressed with each verb. We shall see in the following example that the repetitive marking of the same subject is not necessary in Yoruba. Furthermore, we find a change of tense-aspect-mood in the case of the last verb *n-lá* 'dream' (continuous form) which is also generally possible in Southeast Asian languages. On the interpretation of *pé* as a conjunctive verb, cf. subsection 3.2.2.

- (4) Yoruba (Oyelaran 1982: 141)
Olu ràn wa wá iṣu gbé ko ọrẹ rẹ padà sí Èkó
 Olu send us seek yam carry meet friend his return to Lagos
ní ànà.
 yesterday
 'Olu sent us yesterday to find yams and take them to meet his friend so that he [Olu's friend] can take them with him back to Lagos.'

Example (4) is one of the very few instances to be found in the relevant literature on verb serialization in Yoruba where there are more than two or three verbs or verbal phrases in unmarked juxtaposition. It seems to be a good counterexample to the claim often made by many linguists dealing with verb serialization such as, e. g., Lord 1973 in the field of African linguistics, that verb serialization covers only one single event and does not allow any change of subject without giving any overt morphological or lexical indication. On the other hand, it is interesting to observe that the adverb *ní ànà* 'yesterday' seems to govern more or less the whole sequence of events.

2.2. Converbs

Converbs can be defined as “verb forms that are specialized for the expression of adverbial subordination, but cannot form a sentence on their own, i. e. they do not occur as main predicates of independent clauses”.¹ Furthermore, converbs show restrictions on person-number agreement, tense-aspect-mood, voice, and change of valency.

The following three examples from Tamil, Japanese, and Classical Mongolian show typical converb constructions where the only verb form which can form a sentence on its own appears at the very end of the sentence.

- (5) Tamil (Lehmann 1989: 268)
- kumaar eezu maṇi-kku viṇṇi-ttu eṇṇuntiru-ntu kuḷiyal*
 Kumar seven hour-DAT wake.up-CONV get.up-CONV bath
arai-kku.p pooy pal villakk-i.k kuḷi-ttu uṭamp-ai.t
 room-DAT go:CONV tooth brush-CONV bath-CONV body-ACC
tuṭai-ttu.t talai vaar-i.t tuṇi poṭṭ-ṭu.k kiiṇṇee
 rub-CONV head comb-CONV dress put.on-CONV down
eraṇk-i.t tinṇai.y-il uṭkaar-ntu pattirikkai paṭi-tt-aan.
 get.down-CONV porch-LOC sit-CONV paper read-PAST-3sm
 ‘Kumar woke up at seven o’clock, got up, went to the bathroom, brushed his teeth, took bath [sic], rubbed his body, combed his hair, put on his clothes, went downstairs, sat down on the porch and read the paper.’

Example (5) can be compared to example (1) above, which also shows a linear sequence of several events juxtaposed in the chronological order of their occurrence. It is, however, only the last verb of the sequence in this last example which could also form a sentence on its own. Furthermore, it is only the sentence-final form which is marked for tense-aspect-mood and person. The other verbs are marked by one of the allomorphs of the converb form *-tu* (cf. 4.2.1.1).

- (6) Japanese (*Nihongo tokuhon* [Japanese reader] 1971: 141)
- Watashi wa yooyaku hatto shi-ta kokoromochi ni*
 I TOP at.last amazement do-PAST:REL feeling/mood DAT
nat-te makeitabako ni hi o tsuke-nagara
 become-CONV cigarette LOC fire ACC attach-CONV
hajime-te monoui mabuta o age-te mae no
 for.the.first.time melancholy eyelid ACC raise-CONV front GEN
seki ni koshi o oroshi-te i-ta
 seat LOC loin ACC lower/let.down-CONV be-PAST:REL

shoojo no kao o chotto mi-ta.
 young.women GEN face ACC cursorily/fleetingly see-PAST
 'While I was lighting a cigarette because I at last got into a mood of amazement, I caught a glimpse of the face of the young woman who was sitting in a seat in front [of me] when I raised my melancholy eyelids for the first time.'

In example (6), we find two events in a relation of simultaneity, i. e., *bi o tsuke-nagara* 'lighting' and *mi-ta* 'saw'. The first event of "lighting" is, furthermore, combined with the event of "getting in a mood of amazement", which appears in a causal relation to the former, whereas the second event of "saw" is combined with *mabuta o agete* 'raising the eyebrows' in the framework of a temporal interpretation. The morpheme *-te* and the morpheme *-nagara* are both used to form converbs.

Furthermore, the noun *shoojo* 'young woman' is determined by the relative verb form *koshi o oroshi-te i-ta* 'be sitting', which is constructed periphrastically with a converb form in *-te* plus the auxiliary verb *iru* 'be'.

- (7) Classical Mongolian (Grønbech–Krueger 1955: 36)
- | | | | |
|------------------------|--------------------------|-----------------------------|----------------------------------|
| <i>bi morin-i</i> | <i>aqa-ača</i> | <i>eri-n</i> | <i>ab-ču</i> |
| I horse-ACC | elder.brother-from | seek/ask-CONV | take-CONV |
| <i>degüi-degen</i> | <i>ög-üged,</i> | <i>tere</i> | <i>inu tegün-i</i> |
| younger.brother-DAT:my | give-CONV | that/he | NOM that-ACC |
| <i>nada-ača ab-ču,</i> | <i>bi arıamči ab-ura</i> | <i>ger dотора oro-tala,</i> | |
| I-from | take-CONV | I rope | take-CONV tent inside enter-CONV |
| <i>degüi</i> | <i>ber ken-dür</i> | <i>yayun-i</i> | <i>ču</i> |
| younger.brother | NOM who-DAT/LOC | what-ACC | EMPH |
| <i>ögüilel</i> | <i>ügegüye</i> | <i>mordo-ju</i> | <i>od-bai.</i> |
| word/statement | not/without | ride.off/depart-CONV | go-PAST |
- 'I went and got the horse from my elder brother and gave it to my younger brother, who took it from me and while I went into the tent to get a rope, younger brother, not saying anything to anyone, went riding off.'

In example (7), all the verbs apart from the final one appear in the form of a converb which also more or less determines that verb's semantic relation to the following verb (with e. g. *-ura* marking purpose). This example shows instances of linearity as well as instances of binarity.

3. Verb serialization

3.1. General outline²

Chinese and many other East and Southeast Asian languages belong to the group of “cool” languages as was postulated by Huang 1984 with reference to the use of ‘empty pronouns’ in Chinese.³ If the participants of a verb are assumed to be known, they do not need to be mentioned again in a given context. Thus, all the possibilities given in examples (8 b) to (8 e), which represent different answers to the question in example (8 a), are perfectly grammatical:

- (8) Chinese (Huang 1984: 533)
- a. *Zhāngsān kànjiàn Lǐsì le ma?*
Zhangsan see Lisi TAM QUEST
‘Did Zhangsan see Lisi?’
 - b. *Tā kànjiàn tā le.*
‘He saw him.’
 - c. *kànjiàn tā le.*
‘[He] saw him.’
 - d. *tā kànjiàn le.*
‘He saw [him].’
 - e. *kànjiàn le.*
‘[He] saw [him].’

The following example from the philosopher Zhuangzi (second half of the fourth century B.C.) is a good example of the “coolness” of Classical Chinese with regard to empty pronouns:

- (9) Classical Chinese (Zhuangzi, 4, renjianshi)
- Yán Huì jiàn Zhōngní qǐng xíng xíng yuē: «Xī*
Yán Huì see/visit Confucius request go/travel say where
zhī?— yuē: «jiāng zhī Wēi.— yuē: «Xī wéi yān?— yuē: «Huì
go say FUT go Wei say what make/do there say I:Hui
wén ...»
 hear
 ‘Yan Hui went to see Confucius [in order to] take [his] leave. [Confucius] said: «Where do [you] go to?» – [Yan Hui] replied: «[I] shall go to Wei.» – [Confucius] said: «What do [you] do there?» – [Yan Hui] replied: «I [have] heard, that ...»’

The high frequency of empty pronouns is, however, not the only instance of “coolness” which we can observe in languages such as Chinese. Far more impor-

tant in the context of verb serialization is the high degree of indeterminateness/“coolness” of the verb with regard to Tense-aspect-mood, and the techniques of the dimension of PARTICIPATION.⁴ In the most extreme case of several East and Southeast Asian languages, a verb merely posits an action or a state. One verb – which is often just one syllable – can show enough relevance (cf. Sperber–Wilson 1986) in a given context. Its indeterminateness, however, can be at least partially reduced if necessary by the instrument of verb serialization, i. e., by simply adding another verb to increase the concreteness of the action expressed by the main verb.

As for participation, the following techniques are at least partially realized by the instrument of verb serialization to reduce indeterminateness:

1. valency: increasing valency through the introduction of further noun phrases by means of coverbs and causative verbs
2. orientation: possibility of diathesis through special verbs under special conditions
3. transition: transitivity in the sense of Hopper and Thompson (1980) by the verb *bǎ* ‘bring’ in Chinese (this is not possible in Southeast Asian languages)
4. role assignment: through coverbs
5. cause and effect: through causative verbs
6. complex participata: through conjunctive verbs.

Perhaps the most important consequence of the high degree of indeterminateness is the fact that there are quite a lot of disparate constructions which are realized in the form of verb serialization. Therefore, it seems to be rather pointless to search for a covariation of form (verb serialization) and function in general, since the unmarked juxtaposition of two or more verbs or verb phrases can occur in almost any context where further determination is not necessary.

On the other hand, the ease with which two or more verbs can be juxtaposed provides – if supported by the influence of grammaticalization and attractor positions⁵ – the basis for the emergence of a syntactic paradigm (i. e., a *serial unit*). Such syntactic paradigms can be observed in a surprisingly similar form in East and Southeast Asia, in West Africa (Kwa languages), in some Austronesian languages, and also in many Creole languages.

From the above background, I distinguish two types of verb serialization. The first type of *verb serialization in a broad sense* shows no influence of grammaticalization and attractor positions at all, whereas the particular structures of the second type of *verb serialization in a narrow sense* can be seen to a great extent as

a reflection of these two operational forces. The two types of verb serialization can be further subdivided as follows:

- | | |
|--|--|
| 1. verb serialization in a broad sense | juxtaposition
modifying verb serialization
governing verb serialization. |
| 2. verb serialization in a narrow sense:
(with the influence of grammaticalization or lexicalization) | serial units
(including lexical juxtaposition and resultative constructions). |

The three types of verb serialization in a broad sense establish the basis or point of departure from which grammaticalization can proceed. The following six products of grammaticalization can be seen as resulting from the above types of verb serialization in a broad sense:

1. resultative verbs: modifying verb serialization
2. directional verbs: modifying verb serialization
3. Tense-aspect-mood markers: modifying and governing verb serialization
4. coverbs: juxtaposition and governing verb serialization
5. causative verbs: governing verb serialization
6. conjunctive verbs: governing verb serialization.

Some of these terms may need a short characterization. *Resultative verbs* always occur in verb second position and express a result of the action of the first or main verb. *Directional verbs* also occur after the main verb, and indicate the direction of the action of the main verb from the speaker/the center of interest or towards the speaker/the center of interest. Finally, a verb is a *coverb* if it occurs with the function of an adposition.

Three of the above six products of grammaticalization – i. e., Tense-aspect-mood markers, directional verbs, and coverbs – form, together with the main verb (V), the syntactic paradigm of the *serial unit*; this must be seen as one single constituent with the following approximate maximum structure, which has been developed for East and Southeast Asian languages and which must be slightly modified according to the particular characteristics of each of these languages:

II. TAM coverb v-TAM coverb/directional verb TAM

This structure will be illustrated by the following two examples from Chinese and Khmer:

- (10) Chinese (Bisang 1992: 69)
 Tā jiù yào bǎ “kǒu”-zì xiě zài
 s/he TAM TAM COV(take) mouth-character write COV(be at)

hēibǎn-shang le.

blackboard-on TAM

'He is just about to write the "mouth"-character on the blackboard.'

(11)

Khmer

kəət ba:n phnəə prak mō:k ʔaoy khnom.

he PAST(get) send money come COV(give) I

'He sent me the money.'

3.2. Examples

This subsection is based on the above distinction between two types of verb serialization and is divided, therefore, into two parts. The first part presents verb serialization in a broad sense within the framework of its three main constructions. The second part will be devoted to the description of verb serialization in a narrow sense within the framework of lexical juxtaposition plus the above-mentioned six products of grammaticalization (i. e., resultative verbs, directional verbs, tense-aspect-mood markers, coverbs, causative verbs, and conjunctive verbs).

3.2.1. Verb serialization in a broad sense

Syntactic juxtaposition

Two verbs, verbal phrases or serial units are merely juxtaposed, the relation between the two items being unmarked (particularly cf. example [13]):

(12)

Chinese (Chao 1968: 326)

Tā tiāntiānr xiě xìn huì kè.

he every.day write letters receive callers

'He writes letters and receives callers every day.'

(13)

Chinese (Li-Thompson 1973: 98)

Nǐ guì-xià-lái qín Zhāngsān.

you kneel-go.down-come beg Zhangsan

'You knelt down in order to beg Zhangsan.' [purpose]

'You knelt down and then begged Zhangsan.' [consecutive action]

'You knelt down begging Zhangsan.' [simultaneous action]

'You knelt down and begged Zhangsan.' [alternating action]

Example (12) differs from example (13) in as much as the sequence of the two verbal phrases 'write letters' and 'receive callers' could also be the other way round without any basic change of meaning. Example (12), therefore, allows only a coordinative interpretation, whereas example (13) can be coordinative or narrative (cf. section 4.1).

- (14) Yoruba (Ore 1987: 17)
Dàdà ra mààlúù pá jẹ. |
 Dada buy cow kill eat
 'Dada bought a cow and slaughtered it for food.'
 (for Yoruba also cf. examples [3] and [4])
- (15) Yoruba (Oyelaran 1982: 129)
àgbè wá ògèdè sun jẹ ní oṣù Agà.
 farmer seek plantain roast eat at month May
 'Farmers find only plantain to roast and eat in May.'
- (16) Jabêm (Dempwolff 1939: 81)
Tami sê-ŋi níp masê sê-mên a-jam
 Tami 3PR-take/transport coconut dried 3PR-come 1PER-make
ôlî.
 buy.
 'The Tami brought dried coconuts and we bought them.'
- (17) Jabêm (Zahn 1940: 69)
kiap gê-mên kê-sôm aê-àc.
 official 3SR-come 3SR-scold I-PL
 'The official came and scolded us.'
 'The official came in order to scold us.'

Modifying verb serialization

Here, one verb modifies the other. In Thai, for instance, the modifying verb appears only after the main verb:

- (18) Thai
- a. *kháw wŋ rew.*
 h run quick
 'He runs quickly'.
 - b. *kháw māj wŋ rew.*
 he NEG run quick
 'He doesn't run quickly.'
 - c. *kháw wŋ māj rew.*
 he run NEG quick
 'He runs, but he's not quick.'
- (19) Yoruba (Ekundayo–Akinnaso 1983: 129)
Titi rìn lọ ní, kò sáré lọ.
 Titi walk go be NEG run go
 'Titi left by walking, not by running.'

- (20) Jabêm (Dempwolff 1939: 73)
a-sôm biŋ ê-tu malô.
 2pr-say speech 3sr-become low
 'Speak in a lower voice!'

In Jabêm (cf. example [20]), verbal modifiers must always be introduced by the verb *-tu* 'become', which occurs in the third person singular either of the *realis* (*kê-tu*) or of the *imaginativus* (*ê-tu*).

Governing verb serialization

Typical constructions of this type take verbs like *fear*, *say*, *see*, etc. as their head:

- (21) Chinese
Wǒ kǒngpà tā jīntiān bù huíjiā.
 I fear s/he today NEG go.back.home
 'I fear that s/he won't go back home today.'
- (22) Yoruba (Bamgboṣe 1986: 82)
 a. *ó ní ó fẹ́ẹ̀ lọ*
 he say he want go
 'He_i said he_j would like to go.'
 b. *ó ní óun fẹ́ẹ̀ lọ*
 he say he want go
 'He_i said he_j would like to go.'
- (23) Jabêm (Dempwolff 1939: 83)
aê ga-líc biŋsú-nê pusip gé-ŋac moàdec teŋ.
 I 1sr-see missionary-his cat 3sr-bite mouse one
 'I saw the missionary's cat biting a mouse.'

3.2.2. Verb serialization in a narrow sense

Lexical juxtaposition

In this construction type, two or more verbs which also occur independently form a new polysyllabic verb the meaning of which cannot always be reconstructed from the meaning of its parts. I cannot find any such constructions in Jabêm.

- (24) Khmer
priəp-thiəp ('compare'-'compare') 'compare', *cap phdaəm* ('grasp, take, begin'-'begin') 'begin, start', *rùəs-nvuu* ('live'-'live, be at') 'live, exist, be at', etc.

- (25) Yoruba
rẹ ... jẹ ('cut'-'eat') 'cheat, swindle', *bá ... wí* ('meet'-'say') 'rebuke',
gbà ... gbọ ('get, accept'-'hear, understand') 'believe', *tàn ... jẹ* ('de-
 ceive'-'eat') 'deceive', *bẹ ... wò* ('beg, ask'-'see') 'to visit', etc.
 [cf. Awobuluyi 1978: 53–54 on "splitting verbs".]
- (26) Yoruba (Rowlands 1969: 133)
ó tàn mí jẹ.
 3s trick me eat/consume
 'He deceived me.'

Resultatives

Here, the second verb expresses a result of the action of the first verb:

- (27) Chinese
Tā chī bǎo-le
 s/he eat full-TAM
 'S/he has been eating his/her fill.'
- (28) Yoruba (Oyelaran 1982: 129)
olópàá na olè náà bẹ.
 police whip thief the bleed
 'The police whipped the thief till he bled.'
- (29) Jabêm (Zahn 1940: 215)
bóc seŋ aêàcma jangom gê-bacné.
 pig 3PR:eat our maize 3SR-finish
 'The pigs have finished eating our maize/have eaten all our maize.'

Directional verbs

- (30) Khmer (Bisang 1992: 67)
kəət yò:k ʔyvan coh cəŋ mò:k.
 he take luggage go.down go.out come
 'He takes the luggage out and down [towards the speaker].'
- (31) Yoruba (Ọrẹ 1987: 99)
ná bá ñ-ru òkú lẹ.
 FOC:they then TAM-carry corpse go.
 'And they were carrying the corpse along.'
- (32) Yoruba (Bamgboṣe 1974: 8)
ó ñ-sùn lẹ.
 he TAM-sleep go
 'He is falling asleep.'

- (33) Jabêm (Zahn 1940: 51)
- a. *âê ga-lac ga-mêŋ.*
I 1SR-sail 1SR-come(to 1st person)
'I was sailing (towards the place where I am living).'
- b. *âê mêt-ga-lac.*
I come-1SR-sail.
'I was sailing (towards the place where I am living).'

In Jabêm (example [33]), the stem of the directional verb can also be prefixed to the morphological complex of "TAM/Person-Stem" without producing any change of meaning.

Tense-aspect-mood markers

There seem to be no tense-aspect-mood markers based on verbs in Yoruba.

- (34) Chinese
Tā zhì chuān duǎnkù.
s/he TAM(be.at) put.on shorts
'S/he is just about putting on shorts.'
- (35) Chinese (Chao 1968: 461–462, also cf. 450)
Tā fēi-guò Dàxīyáng.
s/he fly-cross Atlantic
a. 'He flies over the Atlantic.'
b. 'He has already flown over the Atlantic.' [phase complement]
c. 'He has once flown over the Atlantic before.' [experiential aspect]
(On the details of the way the verb *to cross* developed into a tense-aspect-mood marker with different functions cf. Iljic 1987.)
- (36) Jabêm (Zahn 1940: 68)
lau sê-kwê àndu kapôên gê-moa.
people 3PR-build house big 3PR-be.at/stay
'People have long been building a big house.'

Coverbs

Coverbs are mainly used to introduce further participants and to assign case roles. This article will only present a few examples of dative/benefactive, locative, and direction.

a. Dative/benefactive

- (37) Chinese
Wǒ gěi tā mǎi xiāngyān.
I cov(give) he buy cigarettes
'I buy him cigarettes.'/'I buy cigarettes for his sake/on his behalf.'

- (38) Yoruba (Stahlke 1970: 63)
mo bá àbúrò mi mú ìwé wá
 1s cov(hit/meet/for) younger.brother my take book come
fún é.
 cov(give) you
 'I brought you a book for my younger brother.'
 [COV- V - Vd - COV]
- (39) Jabêm (Zahn 1940: 108)
aê ka-sóm gé-dên aôm.
 I 1sr-say/tell 3sr-arrive/go.towards you
 'I told you.' [There is no verb *to give* for marking benefactive in Jabêm.]

b. Locative

In Yoruba, there is the adposition *ní* for the purpose of expressing locativity; other Kwa languages, however, also make use of verbs like *to stay at* to mark locatives (cf. Lord 1973: 271–279).

- (40) Chinese
 a. *Tā zài yīyuàn sǐ-le.*
 s/he cov(be.at) hospital die-TAM
 'S/he died in the hospital.'
 or
 b. *Tā sǐ zài yīyuàn.*
 s/he die cov hospital
 'S/he died in the hospital.'
- (41) Jabêm (Dempwolff 1939: 33)
ga-sô tun ga-moa salen.
 1sr-weave fence 1sr-come forest
 'I wove a fence in the forest.'

c. Direction

- (42) Khmer
Kǝət yɔːk ʔyvan tɿn phɨːm(i).
 he take luggage go village
 'He brought the luggage to the village.'
- (43) Yoruba
mo mú ìwé wá ilé.
 1s take book come house
 'I took a book home.'

- (44) Jabêm (Zahn 1940: 50)
ɛŋ gɛ-ŋi mo ké-sa nuc gɛ-ja.
 he 3sr-take/transport taro 3sr-go.out/leave island 3sr-go
 'He took taro out to the island.' [V - COV - VD]

Causative verbs

There are no causative verbs in Jabêm.

- (45) Chinese
zhèi jiàn shì shǐ wǒ hěn gāoxìng.
 DEM CL matter CAUS:make I very happy
 'This made me very happy.'
 (There are also other verbs to mark causativity in Chinese: *ràng* 'make, call' and *jiào* 'have, let'.)
- (46) Thai (Vichit-Vadakan 1976: 460)
Saākhaā hāj dèg wít.
 Saakhāa CAUS(give) child run
 'Saka had the child run.'
 [The verb *give* is also used as a marker of causativity in Vietnamese (*cho*) and in Khmer (?*aoy*), cf. Bisang 1991: 527–529, Bisang 1992: 44–45]

According to Awobuluyi 1978: 60, there are five causative verbs in Yoruba: *mú* 'take', *dá* 'cause', *sọ* 'say, tell', *fí* 'put, use, apply', and *ṣe* 'make, do'. I shall quote just two examples:

- (47) Yoruba (Ọrẹ 1987: 76)
bọbọ yẹn mú mi bínú gan ní.
 guy that take/cause me get.mad a.lot be
 'That guy really made me mad.'
- (48) Yoruba (Awobuluyi 1978: 60)
ó dá èrín pa mí.
 3s cause laughter to.act.in.a.sudden/energetic.way me
 'He made me laugh.'

Conjunctive verbs

This passage will be devoted to the description of how independent verbs can develop into conjunctions/complementizers. I shall quote examples from South-east Asian languages and from Jabêm. In Yoruba, on the other hand, we find the verb *pé* 'say', for which Lord 1976 claims the function of a complementizer. There are, however, serious arguments against such an interpretation (cf. Oyelaran 1982).

- (49) Hmong (Bertrais-Charrier 1979: 427)
Nws hais tias nag yuav los.
 he say CONJ rain FUT come
 'He said it would be raining.'
- (50) Hmong (Bertrais-Charrier 1979: 300)
Kuv paub hais tias nej yuav tuaj.
 I know CONJ(say.that) you FUT come
 'I know that you will come.'
 [Also compare Thai *wâa* 'say' and Khmer *tha:* 'say' with the same two functions, cf. Bisang 1992: 49.]

In example (49), we find *hais* as a normal verb with the meaning of "say" followed by the complementizer *tias*, which can also – in some rare instances – occur as a verb. In example (50), however, the whole sequence of *hais tias* is used as a complementizer, the main verb being *paub* 'know' (On the process of development from a *verbum dicendi* into a conjunction, cf. Ebert 1991.)

- (51) Khmer (Bisang 1991: 533)
mò:k rò:k kàet 'aoy tì:ay sɔp(te).
 come look.for he CONJ(give) interpret dream
 '[She] was looking for him [a prophet] to interpret his [i. e., her husband's] dream.'

The verb with the meaning of "give" also has the same conjunctive function in Vietnamese (*cho*) and in Thai (*hâj*).

In *Jabêm*, the conjunctive verb forms *gebe* and *èmbe* are both derived from the stem *-be: -mbe* with the meaning of 'to think, believe, want', with *gebe* being the third person singular of the *realis* and *èmbe* being the third person singular of the *imaginativus*. I shall briefly discuss the case of *gebe*, leaving out *èmbe*, which is used for conditionals.

- (52) *Jabêm* (Dempwolff 1939: 90)
lau-ò se-jon kagadé se-be se-no
 human.being-fem 3PR-collect wood 3SR-want 3SR-cook
geŋ.
 something
 'The women were collecting wood in order to cook something.'
- (53) *Jabêm* (Zahn 1940: 310)
malac ŋa-tau ké-kén aê-àc gebe a-pa éné katapa.
 village of.it-master 3SR-send I-PL CONJ 1PER-trim his plank
 'The master of the village sent us to trim his planks.'

In example (52), the subject of the first verb is the same as that of the third verb, whereas in example (53), the subject of the first verb is different from that of the third verb; *gebe* does not agree with these subjects. In the course of further grammaticalization, *gebe* is also used to mark causality and quotation (cf. Bisang 1986: 159–160).

4. Converbs

After some general outlines given in the first subsection of this section, the second subsection will be devoted to the presentation of converb constructions in Tamil, Japanese, and Khalkha Mongolian. This presentation will be organized within the same framework as the presentation of verb serialization in the last section. Through this framework, which covers most of the constructions occurring in both construction types, it will be particularly easy to compare converb constructions and serial verb constructions almost exhaustively.

4.1. General outline

The first distinction we need to introduce into our description of converb construction is, therefore, the distinction between constructions corresponding to verb serialization in a broad sense and constructions corresponding to verb serialization in a narrow sense.

In the subsections on constructions corresponding to verb serialization in a broad sense, we shall see the converbs with their proper function as defined in subsection 2.2. In the subsections on verb serialization in a narrow sense, on the other hand, we find converbs under the influence of grammaticalization or lexicalization, which both lead to a further condensation of two or more events into one more or less single event.

The prototypical functions of converbs, however, can be observed only in the subsections on constructions corresponding to verb serialization in a broad sense. In this context, I would like to distinguish three types of prototypical converbs:

prototypically *coordinative converbs*

prototypically *narrative converbs*

prototypically *conjunctive converbs* [contextual converbs, specialized converbs].

1. Prototypically coordinative converbs can be described as follows. For two sentences (monopredicative units) to be coordinate, there must be the same degree of markedness in both sentences, i. e., there is a symmetry in the marking

of person, tense-aspect-mood, etc. (constructions of this type can be compared to example [12] of verb serialization). Coordinate converb constructions refer to parallel events of the same narrative value, which can be contrasted or fused together into one event. In the latter case, coordination is used to describe the different aspects of one rather important event (cf. Bickel 1991: 34). Among the languages to be discussed in this section, it is only Japanese, which seems to show a converb specialized for the expression of this particular prototypical function (cf. example [54] with *-tari*).

- (54) Japanese (Jorden 1963: 143)
Benkyoo shi-tari tegami o kai-tari, totemo isogashi-katta.
 study do-CONV letter ACC write-CONV very busy-ADJ:PAST
 'What with studying and writing letters (and so on), I was very busy.'

- (55) Hua (Haiman 1985: 80; Bickel 1991: 32)⁶
ba+u+ro-na o+rmi+ro-na
 up-go:3s-SEQ-3s(AS⁷,ss) down-come:3s-SEQ-3s(AS,ss)
hi+e.
 do-DECLARAT:3s
 'S/he kept going up and coming down.'

2. The main function of prototypically narrative converbs is to establish the iconic law that the sequence of events is reflected in the sequence of sentences as a linguistic rule (cf. Bickel 1991: 35 on "Reihung"). Prototypically narrative converbs are mainly oriented towards linearity. The difference between coordination and narrativity is excellently described by a passage from Johanson 1977: 116 on the difference between Turkish *-ip* and *ve*:

The unidirectionality is to be considered as a linguistic value of the 'and' relation expressed by *-ip*. By virtue of this value, the relation may be interpreted as a chronological one. As for the co-ordinative counterpart ... *ve* ..., its conjuncts are, however, subject to the natural rules of linear successivity. (Johanson 1977: 116, also cf. Bickel 1991: 35)

3. Prototypically conjunctive converbs mainly represent the background of an ongoing text and, therefore, show less communicative dynamics in their development than prototypically narrative converbs. They fulfill purposes different from linearity during the production of a text such as concession, conditions, antithesis, temporal relations, etc. They tend to be related to only one referential entity, which leads to their binary character. Formally, they do not fall within the scope of markers in the main clause that indicate illocutional roles. (cf. Bickel 1991: 43–64, on "adsentenziale Subordination"). Their backgrounding character does not necessarily imply one single, exactly determined semantic meaning of

a given converb. This is only the most specialized case along the continuum from contextual converbs to specialized converbs (for these two terms cf. Nedjalkov, this volume). In my view, it is empirically very difficult to maintain a strict distinction between these two terms, as attempted by Nedjalkov.

4.2. Examples from Tamil, Japanese, and Khalkha Mongolian

4.2.1. *Tamil*

In Tamil, there are only two converb forms. The form in *-tu* is characterized by a rich variety of functions which cover more or less the whole range of the three above-mentioned prototypical converbs, whereas the form in *-aal*, which marks conditionality, is limited to the area of prototypical conjunctive converbs.

Apart from causativity, which is rather realized by root serialization (cf. section 6), Tamil converb constructions can occur with all the functions expressed by means of verb serialization in a narrow sense. In the construction corresponding to coverbs, however, we find much less variety. Parallel to the other converb languages mentioned in this section, the verb *to give* with the function of a dative/benefactive marker seems to be the only verb occurring in the context of coverbs.

4.2.1.1. Constructions corresponding to verb serialization in a broad sense

a. the converb in *-tu* (*ntu*, *-i*, *-tu*, *-ttu* [negation: *-aa-mal* or *-aatu*]) (also cf. ex. [5]):

i. with a narrative interpretation:

(56) Tamil (Steever 1989: 11)

mazai pey-tu veyil ati-ttu vāṇavil
rain:NOM rain-CONV sun-NOM beat-CONV rainbow-NOM
tōṇṇ-iy-atu.
appear-PAST-3sn
'It rained, the sun shined, and a rainbow appeared.'

(57) Tamil (Lehmann 1989: 267)

kumaar va-ntu eṇṇ-ai.p paar.kk-a.v-ill-ai.
Kumar come-CONV I-ACC see-INF-be.not-3pln
'Kumar didn't come and didn't see me.'
[The negation of the final main verb is also applied to the converb clause.]

(58) Tamil (Lehmann 1989: 270)

pakal pooy raattiri va-nt-atu.
day go:CONV night come-PAST-3sn

'Daytime went and night came.'

[Subject identity between the converb clause and the finite verb is not required.]

ii. with an adverbial interpretation:

- (59) Tamil (Lehmann 1989: 196–197)
kumaar naarkaali.y-il nimir-ntu uṭkaar-nt-aan.
 Kumar chair-LOC be.upright-CONV sit-PAST-3sm
 'Kumar was sitting upright on the chair.'

iii. with a temporal or causal interpretation:

- (60) Tamil (Lehmann 1989: 273)
aintu naal kaṇi-ttu.k kumaar inṭee va-nt-aan.
 five day pass-CONV Kumar here come-PAST-3sm
 'After five days passed, Kumar came here.'

- (61) Tamil (Lehmann 1989: 273)
mazai pey-tu payir naṇr-aaka vaḷar-nt-atu.
 rain fall-CONV crop goodness-ADV grow-PAST-3sn
 'Because it rained, the crops grew well.'

iv. as a complement to verbs of perception in alternation with infinitive-clauses:

- (62) Tamil (Steever 1989: 11)
nāṇ kumār kār ṭṭi-i pār-tt-ēn.
 I-NOM Kumar-NOM car:ACC drive-CONV see-PAST-1s
 'I saw Kumar driving a car.'

v. as complements to the predicates *iru* 'be' or *il* 'be not' taking a restricted number of nouns as arguments:

- (63) Tamil (Lehmann 1989: 275)
uṇṇ-ai.c coll-i.k kurraam ill-ai.
 you-ACC say-CONV fault be.not-3pn
 'It is not a mistake to blame you.'

vi. conditional: phoneme cluster of the past tense allomorph + *-aal* (negation: *-aa-viṭṭaal*):

- (64) Tamil (Lehmann 1989: 279)
mazai pey-t.aal vaṇṭi naṇai.y-um.
 rain fall-CONV:COND vehicle get.wet-FUT+3sn
 'If it rains, the car will get wet.'

- (65) Tamil (Lehmann 1989: 278)

kumaar va-nt.aal naan avan-itam peecu-v-een.
 Kumar come-CONV:COND I he-LOC talk-FUT-1s
 'If Kumar comes, I will talk to him.'

- vii. with the clitic *-um* 'also, even' we get a concessive interpretation (also cf. example [91] on Japanese):

- (66) Tamil (Lehmann 1989: 282)

mazai pey-t.aal-um naanka! veliyee vilaiyaaṭu-v-oom.
 rain fall-CONV:COND-CONC we outside play-FUT-1s
 'Even if it rains, we will play outside.' [with the main verb in future tense]

4.2.1.2. Constructions corresponding to verb serialization in a narrow sense Lexical juxtaposition:

- (67) Tamil

teri-ntu koḷḷa
 know-CONV hold-INF
 'to understand'

Resultative constructions:

- (68) Tamil

cēr-ntu pōka
 join-CONV go:INF
 'to arrive/reach'

Directional verbs:

- (69) Tamil (Steever 1989: 16)

pāpu avalai orumurai nimir-ntu pār-tt-ān.
 Babu she:ACC strangely lift-CONV look-PAST-3sm
 'Babu looked up at her strangely.'

Formation of tense, aspect and mood:

a. Converb plus *iru* 'be':

- i. With stative main verbs (progressive):

- (70) Tamil (Lehmann 1989: 206)

kumaar enka! viiṭ-ṭ-il taṅk-i iru-kkir-aan.
 Kumar we(OBL) house-LOC stay-CONV be-PRES-3sm
 'Kumar is staying in our house.'

ii. With non-stative main verbs in the converb form (perfect):

- (71) Tamil (Lehmann 1989: 206)
kumaar maturai-kku.p pooy iru-kkir-aan.
 Kumar Madurai-DAT go:CONV be-PRES-3sm
 'Kumar has gone to Madurai.'

b. Converb plus *kon-tu* 'hold' plus *iru* 'be' (progressive in all cases):

- (72) Tamil (Lehmann 1989: 207)
kumaar tinṇaiy-il uṭṭkaar-ntu kon-tu iru-kkir-aan.
 Kumar porch-LOC sit-CONV hold-CONV be-PRES-3sm
 'Kumar is sitting on the porch.'

c. Converb plus *kon-tu* 'hold' plus *vaa* 'come' (durative):

- (73) Tamil (Lehmann 1989: 208)
vilai eer-i.k kon-tu var-um.
 price rise-CONV hold-CONV come-FUT:3sn
 'The prices keep on rising.'

d. Converb plus *viṭu* 'leave' (perfective, also unexpectedness):

- (74) Tamil (Lehmann 1989: 209)
kumaar inta naaval-ai.p paṭi-ttu viṭ-t-aan.
 Kumar this novel-ACC read-CONV leave-PAST-3sm
 'Kumar has read this novel.'

Coverbs:

a. Converb plus *kotu* 'give' (benefactive):

- (75) Tamil (Lehmann 1989: 227)
raajaa kumaar-ukku.k katav-ai.t tira-ntu kotu-tt-aan.
 Raja Kumar-DAT door-ACC open-CONV give-PAST-3sm
 'Raja opened the door for Kumar.'

Causativity:

Causativity is marked according to the pattern of root serialization with morphemes derived from verbs like *vai* 'put', *cey* and *paṇṇu* 'do' (cf. Lehmann 1989: 219–221):

- (76) Tamil (Lehmann 1989: 221)
raajaa kumaar-ai.p paṭi-ppi-tt-aan.
 Raj Kumar-ACC study-CAUS-PAST-3sm
 'Raja made Kumar study.'

Conjunctive verbs:

There are mainly three verbs which can also occur with the function of conjunctive verbs: *en* 'say', *pool* 'seem', *aa* 'become'. These are the only verbs which can occur in a serial verb construction in Tamil, i. e., they can take a finite clause without a complementizing morpheme as their complement (also cf. Steever 1989: 20).

- (77) Tamil (Lehmann 1989: 253)
kumaar inru oru mantiri varu-kir-aar en-t-aan.
 Kumar today a minister come-PRES-3sh say-PAST-3sm
 'Kumar said that a minister would come today.'

- (78) Tamil (Lehmann 1989: 253)
inru oru mantiri varu-kir-aar pool-um.
 today a minister come-PRES-3sh seem-FUT:3sn
 'It seems that a minister is coming today.'

For this reason, the verbs *en*, *pool*, and *aa* are also predetermined to follow a finite verb and to mark it at the same time as a complement to the following verb.

In the following two examples of the present article, however, I shall only present the verb *en* 'say', which is syntactically required to embed a verbless clause or a finite verbal clause. Furthermore, I shall only present the verb 'say' in its converb form *en-ru*, although it can perform its complementizing function in other forms (e. g., infinitive, conditional, future verbal noun, etc.) as well:

- (79) Tamil (Lehmann 1989: 315)
kumaar inru appaa varu-kir-aar en-ru con-n-aan.
 Kumar today father come-PRES-3sh say-CONV say-PAST-3sm
 'Kumar said father would come today.'

- (80) Tamil (Lehmann 1989: 324)
kumaar oru tiruṭaṇ varu-v-aan e-n-ru payappaṭu-kir-aan.
 Kumar a thief come-FUT-3sm say-CONV be.afraid-PRES-3sm
 'Kumar is afraid that a thief would come.'

4.2.2. Japanese

Japanese shows a greater variety of converbs than Tamil. The most frequent converb, which performs many functions in the framework of prototypically narrative and prototypically conjunctive converbs is *-te/-de*. In a similar role we also find the stem form or "continuative" form in *-i*. The converb in *-tari* mainly seems to express coordination. Furthermore, we can find prototypically conjunctive converbs like those in *-nagara* (simultaneity), *-ba* (conditionality), *-tara* (conditionality), and *-te+mo* (concessive conditional).

The converb in *-te/-de* occurs in constructions corresponding to directional verbs, tense-aspect-mood markers, and coverbs, whereas the stem form or the “continuative” form in *-i* can be observed in constructions corresponding to lexical juxtaposition, resultatives, directional verbs, and tense-aspect-mood markers (in combination with some particular verbs like *start*, *finish*, etc.). Causatives are formed according to the principles of root serialization by adding *-ase-*, *-sase-* to the verb stem (on causatives cf. Kuno 1973, Shibatani 1976). Finally, there are no conjunctive verbs in Japanese.

4.2.2.1. Constructions corresponding to verb serialization in a broad sense

a. Converb in *-te/-de*:

- i. with a narrative interpretation:

(81) Japanese (Hinds 1986: 85)
koobe e it-te, tomodachi ni at-te, issho-ni
 Kobe DIR go-CONV friend DAT meet-CONV together
tabe-mashi-ta.
 eat-HON-PAST
 ‘[I] went to Kobe, met my friend, and [we] ate together.’
- ii. with a modificational or simultaneous interpretation:

(82) Japanese
Uta o utat-te iki-mashi-ta.
 song ACC sing-CONV go-HON-PAST
 ‘[He] went along singing.’
- iii. with a causal interpretation:

(83) Japanese
kaze o hii-te, gakko o yasumi-mashi-ta.
 cold ACC catch-CONV school ACC take.time.off-HON-PAST
 ‘Because I caught a cold, I didn’t go to school.’
- iv. with a temporal interpretation:

(84) Japanese
Yakunin o yame-te nan ni naru
 civil.service ACC give.up-CONV what DAT become:PRES
deshoo ka?
 be:DUB/FUT QUEST
 ‘I wonder what he’ll become when he gives up the civil service.’

- v. with a contrastive function:

- (85) Japanese
John wa piano ga joozu de, Mary wa gitaa ga
 John TOP piano NOM good be:CONV Mary TOP guitar NOM
joozu da.
 good be:PRES
 'John is good at the piano, and Mary is good at the guitar.'

- vi. The stem form or the 'continuative' form in *-i* (Kuno 1973: 195–199)⁸

- (86) Japanese (Hinds 1986: 86)
koobe e ik-i tomodachi ni ai-mashi-ta.
 Kobe DIR go-CONV friend DAT meet-HON-PAST
 '[I] went to Kobe and met a friend.'

- b. Converb in *-tari*:

"The purpose of this construction is to indicate that the actions or states so described are representative of other semantically similar actions or states." (Hinds 1986: 87)

- (87) Japanese (Jorden 1963: 143) (cf. example [54])
Benkyoo shi-tari tegami o kai-tari, totemo isogashi-katta.
 study do-CONV letter ACC write-CONV very busy-ADJ:PAST
 'What with studying and writing letters (and so on), I was very busy.'

- c. Converb in *-nagara* (simultaneous, cf. example [6]; concessive, cf. example [88]):

- (88) Japanese
Oishi-ku nai to ii-nagara minna tabe-te
 good-ADV not.be QUOT say-CONV all eat-CONV
shimai-mashi-ta.
 finish-HON-PAST
 'Though he said that it wasn't good, he finally ate up everything'

- d. Converb in *-ba* (conditional; on conditionals and concessives cf. Yamaguchi 1989):

- (89) Japanese (Yamaguchi 1989: 292)
Asu tenki ni nare-ba pikunikkeu ni
 tomorrow good.weather DAT become-CONV picnic LOC
ik-oo.
 go-VOL/HORT
 'If the weather is good tomorrow, let's go on a picnic.'

e. Converb in *-tara* (conditional; similar to *-ba*):

- (90) Japanese (Yamaguchi 1989: 292)
Asu tenki ni nat-tara pikuniku ni
 tomorrow good.weather DAT become-CONV picnic LOC
ik-oo.
 go-VOL/HORT
 'If the weather is good tomorrow, let's go on a picnic.'

f. Converb in *-te.mo* (i. e., *-te* plus *mo* 'too') (concessive conditional):

This converb involves the structure "converb in *-te* plus *-mo* 'also, too'".

- (91) Japanese (Yamaguchi 1989: 295) (Also cf. example [66] on Tamil.)
Haru ni nat-temo kokoro wa hare-nai daroo.
 spring- DAT become-CONV heart TOP clear.up-NEG be:DUB/FUT
 'Even when spring comes I won't be feeling better.'

4.2.2.2. Constructions corresponding to verb serialization in a narrow sense Lexical juxtaposition:

Lexical juxtaposition occurs mainly with the *-i* stem form plus another verb immediately following this verbal stem. Sometimes, it is difficult to say whether a compound should be compared to lexical juxtaposition or to resultatives.

- (92) *naosu* 'fix, repair, repeat': *kaki-naosu* ('write' – 'fix, repair') 'rewrite'
yari-naosu ('do' – 'fix, repair') 'do over'

Resultatives:

These are formed mainly with the *-i* stem form plus another verb immediately following this verbal stem:

- (93) *kami-kiru* ('bite' – 'cut') 'bite off'
 (94) *tori-kesu* ('take' – 'extinguish') 'cancel'
 (95) *kaki-toru* ('write' – 'take') 'take down' [from dictation]
 (96) *ii-tsukeru* ('say' – 'fix') 'command, tell'
mi-tsukeru ('see' – 'fix') 'find'
ochi-tsukeru ('fall' – 'fix') 'settle, calm [trans.]'
uchi-tsukeru 'strike; nail on, drive in a nail'
 (97) *nomi-komu* ('drink' – 'plunge in') 'swallow'
sui-komu ('suck' – 'plunge in') 'inhale',
tobi-komu 'jump in'

a. Directional verbs (with *-te* or with the *-i* stem form):

- (98) Japanese
Hikooki ga nijuu-dai ton-de ki-mashi-ta.
 plane NOM twenty-CL fly-CONV come-HON-PAST
 'Twenty planes flew over (came flying).'
- (99) Japanese
Asoko ni aru bune e oyoide
 over.there LOC be:PRES:REL boat DIR swim-CONV
iki-mashoo.
 go-HON:VOL/HORT
 'Let's swim to that boat over there.'
- (100) Japanese
jibun no mono o motte ki-mashi-ta.
 self GEN thing ACC hold/keep-CONV come-HON-PAST
 '[I] brought my own things.'
- (101) Japanese
kaette kuru 'come back'
kaette iku 'go back'
dete kuru 'come' out
dete iku 'go out'

Formation of tense-aspect-mood:

a. *-te* + *iru* (converb plus 'be'), perfect or progressive:

- (102) Japanese
Basu o mat-te i-masu.
 bus ACC wait-CONV be-HON:PRES
 'I am waiting for the bus.'
- (103) Japanese
Hako no naka e ochi-te i-masu.
 box GEN inside DIR fall-CONV be-HON:PRES
 'It has fallen into the box.'

b. *-te* + *aru* (converb plus existential verb), intransitivizing resultative:

- (104) Japanese
doa ga shime-te aru.
 door NOM close-CONV be:PRES
 'The door has been closed.'

c. *-na-kereba* (negation-converb in *-ba*), plus *nara-nai* (become-negation), necessitative:

- (105) Japanese
Ika-na-kereba nari-ma-sen.
 go-NEG-CONV become/get-HON:PRES-NEG
 '[You] must go.' [lit. 'If you don't go, it doesn't become.']

d. *-i* stem plus certain verbs:

- (106) *yomi-tsuzukeru* 'to continue to read' [continuous]
 (107) *yomi-owaru* 'to finish reading' [telic, terminative]
 (108) *yomi-hajimeru* 'to start reading' [ingressive]

Coverbs (benefactive):

There are quite a few "giving and receiving verbs" (Kuno 1973: 127) which are important in the context of expressing dative/benefactive:

yaru: someone gives something to a person equal or inferior to him.

ageru: someone gives something to a person superior to him

kureru: someone equal or inferior to the speaker gives something to him

morau: someone receives something from a person equal to or inferior to him

itadaku: someone receives something from a person superior to him, etc.

(Kuno 1973: 127)

Apart from these verbs, Kuno also describes the verbs *kudasaru* and *sashiageru* although he does not mention them in the above list.

- (109) Japanese (Kuno 1973: 131)
Mary ga ototoo ni hon o yon-de kure-ta.
 Mary NOM brother DAT book ACC read-CONV give-PAST
 'Mary read the book to my brother (for me).'
- (110) Japanese (Kuno 1973: 133)
Watakushi wa sensei ni tanon-de kodomo ni hon o
 I TOP teacher DAT ask-CONV child DAT book ACC
yon-de yat-te itadai-ta.
 read-CONV give-CONV get-PAST
 'I received the favor of the teacher's giving me the favor of reading books to my child.'

4.2.3. *Khalkha Mongolian*

Khalkha Mongolian shows rather more converbs than even Japanese. The most frequent and possibly the most important converbs are those in *-ᠵ* (simultaneity,

in constructions with certain verbs) and *-aad* (*-ood*, *-eed*, *-ööd*) (anteriority). Other converbs express conditionals, concessives, and several temporal relations.

Furthermore, the converb in *-ž* occurs in constructions corresponding to lexical juxtaposition, directional verbs, tense-aspect-mood markers, and coverbs, and with the conjunctive verb *gež*. The converb in *-aad* (*-ood*, *-eed*, *-ööd*) can be observed in the context of periphrastic tense-aspect-mood forms. Causativity is expressed by several verbal suffixes which will not be mentioned in this article. Finally, I have not been able to find any good examples corresponding to resultatives.

4.2.3.1. Constructions corresponding to verb serialization in a broad sense

a. Converb in *-ž* (simultaneity):

- (111) Khalkha Mongolian (Vietze 1974: 72)
Cas or-ž xijten bol-loo.
 snow fall-CONV cold get-TAM
 'When the snow was falling, it became cold.'
- (112) Khalkha Mongolian
temee bilči-ž jav-na.
 camel graze-CONV walk-TAM
 'A camel walks grazing.'
- (113) Khalkha Mongolian (Street 1963: 221)
Minij düü neg devter nom unši-ž suu-ž baj-na.
 my brother one book book read-CONV sit-CONV be-TAM
 'My younger brother is sitting reading a book.'

This converb also occurs with certain verbs like, for example, *to try* or with some auxiliary verbs:

- (114) Khalkha Mongolian (Vietze 1974: 73)
Bi ene ažl-yg xij-ž üž-ne.
 I this work-ACC make-CONV see-TAM
 'I shall try to do this work.'
- (115) Khalkha Mongolian (Vietze 1974: 72)
Ta ene ažl-yg xij-ž čad-ax uu?
 you this work-ACC make-CONV can-VN QUEST
 'Can you do this work?' [VN = verbal noun]

b. Converb in *-n* (adverbial):

This converb does not occur very often in spoken Mongolian. It is, however, much used in written Mongolian, where its function is almost identical to that of the converb *-ž*.

- (116) Khalkha Mongolian (Vietze 1974: 110)
Biejn tamirčin alcuur-aa garga-n nūür-ee arči-ž
 sportsman towel-his take.out-CONV face-his wipe-CONV
baj-na.
 be-TAM
 'The sportsman took out his towel and wiped his face.'
- c. Converb in *-aad* (*-ood*, *-eed*, *-ööd*) (anteriority):
- (117) Khalkha Mongolian (Vietze 1974: 73)
Bi duud surguul' tögs-ööd end ir-sen
 I middle school finish-CONV here come-TAM
 'After having finished middle school, I came here.'
- (118) Khalkha Mongolian (Street 1963: 223)
xojoul bjacxan jari-lca-ž suu-ž bajg-aad keino-d
 two a.bit talk-together-TAM sit-CONV be-CONV cinema-LOC
jav-ax-aar bol-ov.
 go-VN-INSTR become-TAM
 'After sitting and chatting a bit, the two of us decided to go to a movie.'
- (119) Khalkha Mongolian (Poppe 1970: 160)
asar ndalgij šönö xetr-eed altan nar züün
 very soon night go.beyond.the.limits-CONV gold sun east
žüg-ees manda-ž alivaag gijgüül-eed margaas
 side-from rise-CONV everything:ACC illuminate-CONV tomorrow
bol-na.
 become-TAM
 'Very soon, night will be over, the golden sun will rise in the east and illuminate everything, and it will be tomorrow.'
- d. Converb in *-val* (*-vol*, *-vel*, *-völ*) (conditional; temporal: anteriority):
- (120) Khalkha Mongolian (Vietze 1974: 92)
exel-bel duusg-ax xeregtej.
 start-CONV finish-VN be.necessary:PRES
 'If one starts [doing something], one must finish it.'
- e. Converb in *-vč* (concessivity)
- (121) Khalkha Mongolian (Vietze 1974: 110)
Cas oro-vč gadaa xijten biš.
 snow fall-CONV outdoor cold NEG
 'Though it was snowing, it was not cold outdoors.'

f. Converb in *-tal* (*-tel*, *-tol*, *-töl*):

This converb indicates that its action goes on until the beginning of the action of the main verb enters the scene. Sometimes it also expresses simultaneity.

(122) Khalkha Mongolian (Street 1963: 225)

xöl-öö jadar-tal jav-laa.
leg-POSS get.tired-CONV go/walk-TAM
'I walked until my legs got tired.'

g. Converb in *-saar* (*-seer*, *-soor*, *-söör*) (anteriority; when, as soon as):

(123) Khalkha Mongolian (Street 1963: 227)

ter ir-seer bi jav-na.
he come-CONV I go-TAM
'I'll go as soon as he comes.'

h. Converb in *-magc* (*-mogc*, *-megc*, *-mögc*) (immediate anteriority):

(124) Khalkha Mongolian (Vietze 1974: 145)

Bi nom unši-ž excel-megc бүх jum-yg mart-dag jum.
I book read-CONV start-CONV all thing-ACC forget-VN COP:be
'As soon as I start reading a book, I forget everything [else].'

i. Converb in *-axlaar* (*-exleer*, *-axloor*, *-öxlöör*) (immediate anteriority):

(125) Khalkha Mongolian (Vietze 1974: 148)

Nar gar-axlaar dulaan bol-ou.
sun come.out/appear-CONV warm become-TAM
'As soon as the sun appears it gets warmer.'

j. Converb in *-xaar* ('instead of, rather than'):

(126) Khalkha Mongolian (Street 1963: 225)

ingež cag-aa süjtge-xeer ger-ee duud'ja.
this.way time-POSS waste-CONV house-POSS call-TAM
'Instead of wasting my time this way I'll call home.'

4.2.3.2. Constructions corresponding to verb serialization in a narrow sense

Lexical juxtaposition:

(127) Khalkha Mongolian (Street 1963: 144)

sonso-ž med-ex
hear-CONV know
'to understand'

Directional verbs:

These are: *-ž* + *ir-ex* ‘come’; *-ž* + *jav-ax* ‘go’; *-ž* + *or-ox* ‘enter’; *-ž* + *gar-ax* ‘go out’.

- (128) Khalkha Mongolian (Street 1963: 146)
šuvuu nis-č ir-lee.
 bird fly-CONV come-TAM
 ‘A bird flew up (to us).’ (lit. ‘came flying’)

- (129) Khalkha Mongolian (Street 1963: 147)
šuvuu nis-č jav-laa.
 bird fly-CONV go-TAM
 ‘The bird flew away.’ (lit. ‘went flying’)

- (130) Khalkha Mongolian (Street 1963: 148)
ter ger-t-ee gūj-ž or-žee.
 he house-LOC-his run-CONV enter-TAM
 ‘He ran inside his house.’

Formation of tense-aspect-mood:

a. *-ž* + *bajx* (durative):

- (131) Khalkha Mongolian (Street 1963: 145)
Ter or-ž ir-ž baj-na.
 he enter-CONV come-CONV be-TAM
 ‘He is on his way in.’

- (132) Khalkha Mongolian (Street 1963: 152)
Marta-ž baj-na.
 forget-CONV be-TAM
 ‘I don’t remember.’

b. *-aad* + *bajx*

i. Experiential (with a verb of perfective meaning):

- (133) Khalkha Mongolian (Street 1963: 153)
exner av-aad xojor xöörxön xüüxed-tej bolčix-ood
 wife take-CONV two lovely child-PL-with become:PERF-CONV
baj-na.
 be-TAM
 ‘He has already gotten married and has two lovely children.’

- ii. with verbs of durative meaning, this form can have the meaning of 'to be always doing':

(134) Khalkha Mongolian (Street 1963: 153)

ta jaagaad jaar-aad baj-na?
 you why hurry-CONV be-TAM
 'Why are you always hurrying?'

- c. *-ž* + *sun-x* 'sit, live, dwell' (durative: 'to keep on, to stay'):

(135) Khalkha Mongolian (Street 1963: 149)

či juund inee-ž sun-ž baj-na?
 you why laugh-CONV stay-CONV be-TAM
 'Why do you keep on laughing?'

- d. *-ax* (verbal noun + *ge-ž* (converb: 'saying') + *bajx* 'be' (immediate future: to be about to):

(136) Khalkha Mongolian (Vietze 1974: 105)

Bi odoo kino-d jav-ax ge-ž baj-na.
 I now cinema-LOC go-VN say-CONV be-TAM
 'I am now about to go to the cinema.'

Coverbs:

The most important verb in this context is once again the verb *to give* (*ög-öx*) for dative/benefactive:

(137) Khalkha Mongolian (Street 1963: 151)

- a. *Bi čam-d xel-ž ög-nö.*
 I you-DAT/LOC say-CONV give-TAM
 'I shall say it to you.'
- b. *tüünijg duuda-ž ög-örej.*
 him phone-CONV give-IMPER
 'Plase call him [to the phone] for [me].'

Conjunctive verbs:

The most frequent converb performing the function of a conjunctive verb is *gež*, which is the converb form of *ge-x* 'say, speak'. It occurs with various conjunctive functions:

- a. as a marker of direct or indirect speech:

(138) Khalkha Mongolian (Poppe 1970: 163)

Bata namaig ene nom-ig unši-sen un gež asun-va.
 Bata me this book-ACC read-VN:TAM QUEST CONJ ask-TAM
 'Bata asked me whether I had read this book.'

b. with some other verbs:

- (139) Khalkha Mongolian (Street 1963: 172)
aav margaš ir-ne gež med-ne.
 father tomorrow come-TAM CONJ know-TAM
 'He knows that the father will come tomorrow.'

c. As a marker of purpose in combination with the verbal noun [VN] in *-ax*:

- (140) Khalkha Mongolian (Vietze 1974: 105)
Bi jum xudalda-ž av-ax gež xot ruu jav-san.
 I something buy-CONV take-VN CONJ city towards go-VN:TAM
 'I went to the city in order to buy something.'

5. Verb serialization and converbs

The material presented in sections 3 and 4 leads me to compare the two phenomena of verb serialization and converbs within the framework of the following four conclusions, which will be further discussed in four respective subsections:

1. The functional areas covered by verb serialization and by converb constructions are roughly the same.
2. Verb serialization and converb constructions seem to be areal phenomena (cf. Masica 1976).
3. The difference between languages operating with verb serialization and those operating with converbs seems to be due to a different degree of *indeterminateness* (i. e., lack of obligatory marking), which allows the emergence of *asymmetry* in the case of the converb languages.
4. Morphology can be another factor preventing the development of asymmetry.

5.1. Remarks on point 1 ("roughly the same functional area")

Verb serialization in a broad sense and converb constructions – as said above – cover roughly the same functional area. One should note, however, that coordination cannot be expressed through verb serialization in all serial languages. In Chinese, for instance, verb serialization can express coordination; topicalization and some other techniques, however, are only possible in the case of a conjunctive or narrative interpretation, as we can see from example (141), which is the topicalized version of example (13):

- (141) Chinese
Zhāngsān, nǐ guì-xià-lái qín.
 Zhangsan, you kneel-go.down-come beg
 'You knelt down in order to beg Zhangsan.' [purpose]

In Yoruba, however, verb serialization cannot express coordination:

- (142) Yoruba (Lawal 1985: 157, also cf. Bickel 1991: 40)
 a. *Ayò sè iṣu ó sì jẹ é.* vs. b. **Ayò sè iṣu Ø sì jẹ é.*
 Ayo cook yam he and eat it
 'Ayo cooked yam and ate (it).'

Verb serialization in a narrow sense and converb constructions seem to follow roughly the same patterns of grammaticalization. In the case of coverbs, one can observe a greater wealth of semantic functions marked by verb serialization than by converb constructions. This comes as no surprise, if one keeps in mind the fact that serial languages tend to show less determinateness in the marking of cases. Causative constructions are expressed in most converb languages by affixes, which in many cases, can be compared to root serialization (cf. section 6).

5.2. Remarks on point 2 ("areal phenomena: the coexistence of both construction types in one language")

Most languages are either predominantly converb languages or predominantly serial languages on the basis of their geographic distribution. This is true for such well-known European languages as, for example, English and Russian, which both make quite extensive use of converbs in certain functional and syntactic areas. Thus, one of the functions of the *-ing* form in English is that of a converb (cf. example [143]; for further literature cf., e.g., Kortmann 1988). In Russian, it is the so-called *deepričastie* which performs the function of a converb (cf. example [144]; for further discussion, cf., e.g., Brecht 1976, Rappaport 1984):

- (143) Smoking *a cigarette*, the girl entered the room.
 (144) Russian (cf. Nedjalkov, this volume)
Ljubj-a lest', on okružil sebja podxalimami.
 like-CONV flattery he surrounded himself with.sycophants
 'Liking flattery, he surrounded himself with sycophants.'

Nevertheless, there seem to be some rather marginal instances of verb serialization in both languages as well:

- (145) English (Pullum 1990: 219–222)⁹
- Go get the paper. I told you to go get the paper. Every day I go get the paper.*
 - Come get the paper. I told you to come get the paper. Everyday I come get the paper.*
 - Help get the paper.*
 - Come go eat with us.*
- (146) Russian (Weiss 1991)¹⁰
- A ja tebja, govorit, sižu dožidajus'.*
 but I you he.says I.am.sitting I.am.waiting
 'But, he says, I was sitting there waiting for you.'

There are, however, some other languages in which both types of construction cooccur, with each of these types covering certain parts of the framework applied in sections 3 and 4. In the present article, we shall briefly consider Tibetan and Tamil as cases in point.

Tibetan

(See DeLancey 1991; for other Tibeto-Burman languages such as Lahu, cf. Matsoff 1973: 203–205.) In Tibetan, the converb morpheme *-byas* is compulsory only in constructions corresponding to verb serialization in a broad sense, as in example (147), but not in constructions which fall within the concept of verb serialization in a narrow sense, as in example (148), where *-byas* is optional:

- (147) Tibetan (DeLancey 1991: 4)
- stag-gi gyag-la so brgyab-byas bsad-pa red.*
 tiger-ERG yak-DAT bit-NF:CONV kill-PERF
 'The tiger bit the yak and killed it.'
- (148) Tibetan (DeLancey 1991: 6)
- kho bros(-byas) yongs-pa red.*
 he flee(-NF:CONV) come-PERF
 'He fled hither (or toward the deictic center).'

In languages like Tibetan and other Tibeto-Burman languages, the expansion of the use of serial verb constructions must be seen as the result of contact with other languages spoken in adjoining areas (such as Chinese) which show verb serialization (cf. DeLancey 1991).

Classical-Tamil

(See Steever 1989). We have already seen, in examples (77) and (78), that there are still a few verbs like *en* 'say', *pool* 'seem', and *aa* 'become' in modern Tamil

which can occur in serial verb constructions. These verbs, together with some other structures, are only the remnants of a formerly rather widespread area of verb serialization as described in Steever 1989.

In Classical Tamil, one very important instrument to express negation was verb serialization. Thus, the first verb appeared in the affirmative, followed by the juxtaposed second verb, which was always the verb 'to become' in the negative:

- (149) Classical Tamil (Steever 1989: 42)

ceḷ-v-ēṁ all-ēṁ
go-FUT-1p become:NEG-1p
'We will not go.'

- (150) Classical Tamil (Steever 1989: 42)

uy-ntaṇ-ar all-ar.
escape-PRES.PERF-3p become:NEG-3p

- (151) Classical Tamil (Steever 1989: 43)

kēḷ-ēṁ all-ēṁ, kēḷ-ṭaṇ-am.
hear:NEG-1p become:NEG-1p hear-PRES.PERF-1p
'It is not that we do not hear: we have heard.'

The other instrument for expressing negation was root serialization. In this construction, the negative root of the verb 'to become' – that is, *-al-* – was suffixed to the root of the main verb:

- (152) Classical Tamil (Steever 1989: 43–44)

- a. *maṇa-(v)al-ēṇ.*
forget-become:NEG-1s
'I will not forget.'
- b. *ceḷ-al-am.*
go-become:NEG-1p
'We do not go.'

Unfortunately, the difference between the two types of construction, if there is any at all, is not clear: "not enough is yet known about these examples to claim that the alternation is one of free variation." (Steever 1989: 43)

Verb serialization is, however, not limited to negation in Classical Tamil; it occurred quite commonly in both types of verb serialization, i. e., in verb serialization in a broad sense, as in example (153) and in verb serialization in a narrow sense, as in examples (154) and (155):

Syntactic juxtapositions:

- (153) Classical Tamil (Steever 1989: 45)
kaṇ-ṭaṇ-eṇ *varu-v-al.*
 see-PRES.PERF-1s come-FUT-1s
 'I will see and come.'

Lexical juxtaposition (lexical compounds):

- (154) Classical Tamil (Steever 1989: 45)
ierī-ntaṇ-ar *koḷ-am-ē.*
 know-PRES.PERF-3p hold-OPT-(3p)-EMPH
 'May they understand it.'

Resultatives (compound verbs):

- (155) Classical Tamil (Steever 1989: 45)
cēr-ntaṇ-ir *ceḷ-ku-vir.*
 join-PRES.PERF-2p go-FUT-2p
 'You will reach/arrive there.'

In the case of Tamil, however, the decline of verb serialization must be explained by inner-linguistic changes rather than by language contact:

The use of the SCF [Serial Construction Form] in Classical Tamil steadily declined during the medieval period so that it had virtually fallen from the language by the dawn of the early modern period. The loss ... was partly motivated by the need to overcome the tension between the functional and formal treatments of finiteness. (Steever 1989: 47)

This process of overcoming the tension between the two treatments of finiteness must also have supported a more clear-cut crystallization of asymmetry, which will be further discussed in the next subsection. Malayāḷam, another Dravidian language, seems to be even more extreme in its treatment of finiteness:

Malayāḷam, which branched off from Tamil during the early medieval period, seems to have chosen a more radical way of eliminating the tension between the two treatments of finiteness. It lost its subject-verb agreement rules altogether, with the result that the sole criterion for the finiteness of a verb in the modern language is whether it appears in the position specially designated for finite predicates. There is no longer any redundant morphological marking to help us to identify the finite verb. (Steever 1989: 47)

In none of the Dravidian languages, however, did the process of eliminating the tension between the functional and formal treatments of finiteness disturb the potential of asymmetry which is – in my view – vital for the development of converbs.

5.3. Remarks on point 3 ("the high degree of indeterminateness and the emergence of asymmetry")

Languages in which the categories of person/number agreement, tense-aspect-mood and participation do not need to be obligatorily expressed in the verb – i. e., languages showing a high degree of indeterminateness with regard to these categories – lack a very important instrument to develop a certain asymmetry between finite and nonfinite forms, or – to put it more cautiously – between complete [maximum] verbal forms and less complete verbal forms which can take the shape of converbs.

Since the less complete verbal forms do not have to carry the whole burden of information given in the complete form, they are free to take on other functions from the realm of the syntax of sentence combination, as well as from the realm of discourse pragmatics. In this context, the fact that converb languages very often display an almost complete lack of conjunctions comes as no surprise, since the type of sentence combination performed by conjunctions can be effectively realized by the asymmetrical potential within the verbal structure of these languages. As was said by Grønbech 1936 with reference to Turkish, such languages do not actually need conjunctions:

By nature, the use of conjunctions is alien to Turkish. Apart from very few exceptions conjunctions seem to have developed only under the influence of foreign languages partly through direct borrowing, partly through the imitation of foreign sentence constructions by means of elements from the respective original language. For that reason, they almost do not occur in the Turkish language of the inscriptions and in the conservative Northern dialects. Coordination is simply expressed by juxtaposition of words and sentences while subordination is expressed by numerous verbal forms showing a wealth of nuances; subordinative conjunctions in the context of clause-combining are a violation of Turkish sentence structure. (Grønbech 1936: 51; my translation)

5.4. Remarks of point 4: Jabêm ("morphology and the development of asymmetry")

As we can see from Jabêm, there must also exist other – morphological – factors preventing the development of asymmetry. In this language, there are only two sets of prefixes combining two aspects (*realis* [R] and *imaginativus* [I], cf. Dempwolff 1939) with seven forms to mark person. The phonological quality of the verb stem yields five different classes of verbs, of which I shall briefly present class I and class II (for further information, cf. Dempwolff 1939: 12–19, and Bradshaw 1979):

Class I: monosyllabic verb stems with high tone (stems beginning with *k*, *p*, or *t*, some stems beginning with *s*). Paradigm: *-sôm* 'say, speak'.

Class II: monosyllabic verb stems with low tone (stems beginning with *b*, *d*, *g*, some stems beginning with *j*, *w* or with a vowel; there are some exceptions to this class which belong to class V, which will not be treated in the present article). Furthermore, the stems in *b*, *d*, *g* and *s* are prenasalized in the *imaginativus*.

Paradigm: *-suŋ*: *-nsuŋ* 'push'.

Table 1. The two sets of prefixes combining two aspects in Jabêm

	CLASS I		CLASS II	
	<i>realis</i>	<i>imaginativus</i>	<i>realis</i>	<i>imaginativus</i>
1s	ka-sôm	ja-sôm	ga-suŋ	ja-nŋsuŋ
2s	kô-sôm	ô-sôm	gô-suŋ	ô-nŋsuŋ
3s	kê-sôm	ê-sôm	gê-suŋ	ê-nŋsuŋ
1pl incl		ta-sôm	da-suŋ	da-nŋsuŋ
1pl excl		a-sôm	à-suŋ	à-nŋsuŋ
2pl		a-sôm	à-suŋ	à-nŋsuŋ
3pl		sê-sôm	sê-suŋ	sê-nŋsuŋ

As we can see from the paradigms shown in Table 1, the person/aspect prefixes are tightly knit to the verb stem, with their form depending on its phonological/tonal qualities. Thus, a high tone stem yields the unvoiced prefix *ka-* for the first person *realis*, whereas a low tone stem yields the voiced prefix *ga-*. The connection between stem and person/aspect prefixes is so tight that there is no chance for the verb stem to occur independently. Thus, there is no chance for asymmetry to develop.

6. Root serialization

Root serialization (RS) is formally different from verb serialization in as much as we find only combinations of verbal roots, which in most cases cannot form sentences on their own. This type of construction is very prominently represented in many Papuan languages (e.g., Alamlak, Yimas, Kalam),¹¹ but it may also occur in Classical Japanese, as I would like to suggest from the data presented in Quinn 1990. The phenomenon of root serialization has to be situated somewhere between syntax and lexicon (cf. Bruce 1984, 1988, on Alamlak). Sentences (monopredicative units) in languages with root serialization show a different degree of compactness in comparison to languages with verb serializa-

tion. Root serialization occurs in the context of constructions corresponding to verb serialization in a narrow sense as well as in those corresponding to verb serialization in a broad sense.

The rest of this section will be devoted to the description of root serialization within the same framework as has already been applied to verb serialization (section 3) and converbs (section 4).

6.1. Constructions corresponding to verb serialization in a broad sense

The examples corresponding to verb serialization in a broad sense seem to be limited to syntactic juxtaposition and to some ambiguous cases which can also be interpreted in terms of modifying verb serialization. The situation of this type of verb serialization can be described very adequately by quoting Bruce 1988 on Alamlak:

[The] comparison of Alamlak serial verbs with other syntactic and morphological forms suggests that the degrees of morphological compactness of two or more verb roots reflects the degree of conventionalization of the ideas as a single unit. (Bruce 1988: 22)

Thus, the criterion which leads the speaker to choose a construction with root serialization, if he wants to combine two or more events, rather than a structure with verb serialization or with converbs, seems to be the fact that the cooccurrence of these events is highly conventionalized. Bruce 1988 gives the following comment on the two examples quoted below. Both examples present a combination of the same two events; the first example, however, makes use of a construction with verb serialization, whereas the second makes use of root serialization:

(156) Alamlak (Bruce 1988: 24, 26)

- a. *Yènt mi-ak-r-t, tita-r-t.*
 girl ELEV-get-3sm-3sf carry.on.shoulders-3sm-3sf
 'He got the girl down (there); he carried her on his shoulders.'
- b. *Yènt mi-ak-tita-r-t.*
 girl ELEV-get-carry.on.shoulders-3sm-3sf
 'He got (a/the) girl down there, carried (her) on (his) shoulders.'

The SR construction in (156 b) is similar to the complex sentence of (156 a) in that it expresses a transparent complex of sequential events. Serial constructions are more restricted, however, in terms of the actor role of the clause and the scope of elevationals and negatives. (Bruce 1988: 26)

The following two examples show that negation is extended to cover all the members of a construction with root serialization:

- (157) Alamblak (Foley 1986: 117; Bruce 1984)
tandbi-ak-ni-më-t-m.
 cook-get-go-REM.PAST-3sf-3pl
 'She cooked, got them and went.'
- (158) Alamblak (Bruce 1988: 27)
Ritm fñji tandbi-ak-ni-r-më-t-m
 insects NEG roast-get-go-I-REM.PAST-3sf-3pl
 'She did not roast (and) get the insects (and) go.'

Finally, let me quote two ambiguous examples which fall somewhere between syntactic juxtaposition and modifying verb serialization:

- (159) Alamblak (Bruce 1988: 21)
dbëhna-nob-më-r.
 sick-die-REM.PAST-3sm
 'He was deathly sick' or 'He was sick and died.'
- (160) Yimas (Foley 1986: 179)
impa-mpu-yakal-irim-tay-ntut.
 3dlU-3plA-TAM-stand-see-REM.PAST
 'They stood watching them two.'

6.2. Constructions corresponding to verb serialization in a narrow sense

This subsection will only give some examples of structures corresponding to resultatives, directional verbs, tense-aspect-mood markers, coverbs, and causative verbs, in order to illustrate the parallels between root serialization on the one hand, and verb serialization and converbs on the other. The existence of lexical juxtaposition should be quite evident in the case of root serialization, which must be situated between syntax and lexicon. Finally, I have not been able to find any examples corresponding to conjunctive verbs.

Resultative constructions:

- (161) Alamblak (Foley–Van Valin 1984: 362)
Yifem-r fëh-t tu-finah-hatë-ne
 father-m pig-f throw-arrive-SR-SUBD
ha-nayay-më-r-t.
 CAUS-come-REM.PAST-3sma-3sfU
 'After father shot a pig, he brought it.'

Directional verbs:

(162) Dani (Foley 1986: 149; Bromley 1981)¹²

- a. *pi a-k-a*
descend come-R-3sA
'come down'
- b. *ki a-k-a*
enter come-R-3sA
'He came in.'

Tense-action-mood:

(163) Alamlak (Bruce 1988: 21)

tir-t kipta-timbhë-më-r-t.
hand-3sf wash-sever:CESSATIVE-REM.PAST-3sm-3sf
'He stopped washing (his) hand.'

(164) Kalam (Foley 1986: 144)

b yob ag md-p-ay.
man big sound stay-PRES-3pl
'The big men are still talking.'

(165) Kalam (Foley 1986: 144)

b yob ag d-p-ay.
man big sound hold-PRES-3pl
'The big men have finished talking.'

Coverbs:

(166) Alamlak (Bruce 1988: 39)

Na yawyt yimam wikna-hay-më-an-m.
1s dog people buy-give-REM.PAST-1s-3pl
'I bought a dog and gave it to the people' or 'I bought a dog for the people.'

(167) Yimas (Foley 1986: 114)

panmal uranjë ki-n-ŋa-yara-ŋa-t.
man:1sg coconut:vsg vsg-1sgA-1sgU-get-give-PERF
'The man got a coconut for me.'

Causative verbs:

Causativity in Alamlak is marked in some cases by the verb stems of 'to give' or 'to get', and in some other cases by suffixes which can almost certainly be

traced back to these verb stems (for further details, cf. Bruce 1984, Bruce 1988: 37–38).

- (168) Alamlak (Foley 1986: 155, Bruce 1984)
binu-t dob-t hay-ni-më-t-t.
 flood-f canoe-f give-go-REM.PAST-3sfa-3sfu
 'The flood took the canoe away.' [-*kak*- 'get']

Abbreviations

A	Agent	INSTR	Instrumental
ACC	Accusative	LOC	Locative
ADJ	Adjective	NEG	Negation
ADV	Adverb/Adverbial	NF	Non-Finite
CAUS	Causative	NOM	Nominative
CL	Classifier	NP	Noun Phrase
CONC	Concessive	OBL	Oblique
COND	Conditional	OPT	Optative
CONJ	Conjunction	PAST	Past
CONT	Continuous Form	PERF	Perfect, Perfective
CONV	Converb	PL	Plural
COP	Copula	POSS	Possession
DAT	Dative	PRES	Present Tense
DECLARAT	Declarative	PRES.PERF	Present Perfect
DEM	Demonstrative	QUEST	Question Particle
DIR	Directional	R	Realis
DUB	Dubitative	REL	Relative Form
dl	dual	REM.PAST	Remote Past
ELEV	Elevational	SEQ	Sequential Form
EMPH	Emphasis, Emphatic Particle	sm	singular masculine
ERG	Ergative	SR	Same Referent
FOC	Focus	SUBD	Subordinator
FUT	Future	TAM	Tense, Aspect, Mood
GEN	Genitive	TOP	Topic
HORT	Hortative	U	Undergoer
I	Irrealis	VN	Verbal Noun
IMPER	Imperative	VOL	Volitional
INF	Infinitive		

The roman numerals in the examples from Yimas refer to different noun classes.

Notes

1. Nedjalkov's "approximate definition" (in this volume) can be seen as a good specification:
... we can define a converb as a verb form which depends syntactically on another verb form, but is not its syntactic actant, i. e., does not realize its semantic valencies. Thus, a *canonical* (i. e., noncombined) converb can occupy (1) the position of an adjunct, i. e., an adverbial, but cannot occupy the positions: (2) of the only predicate of a simple sentence (without additional auxiliary elements), (3) of nominal attributes, (4) of a clausal actant (i. e., it cannot depend on verbs such as *begin*, *order*, etc.), (5) of a nominal actant (it does not occur in subject and object position).
2. The ideas expressed in this section are roughly the same as in Bisang 1991; the concept of "coolness" is introduced in Bisang 1992: 24–25.
3. The "hot-cool" distinction was first introduced by Marshall McLuhan 1964 in the context of the media. "A medium is 'hot' if the communication process involves little or no audience participation, and 'cool' if active audience participation is required." (Huang 1984: 531)
4. The term PARTICIPATION is from Seiler (cf., e. g., Seiler 1988: 98–108; Seiler–Premper 1991; also cf. Broschart 1991) and refers to the linguistic representation of events (*Sachverhalte*) which are understood cognitively as the conceptualization of physical perceptions (e. g., a motor-crash). The process of conceptualizing a certain event implies a certain degree of selection, i. e., some aspects of the event are neglected while other aspects are moved into the center of interest. The degree of selection is even much higher if we want to transform a given perception into language. In this case, we must observe two principles. The first is the principle of linearity. The second principle represents a given event as a relation between elements which participate in that event (i. e., the *participants*) and something in which these elements are participating (i. e., the *participatum*). The *participants* can be seen in the framework of case grammar (semantically) or in the framework of valency, case marking and diathesis (syntactically), while the *participatum* is syntactically expressed by predicates which are represented semantically by actions, processes or states. *Participants* and *participata* are subsumed within the dimension of *participation* which is divided into several techniques of which I mention valency, orientation, transition, role assignment, cause and effect and complex participata (complex sentences) in the present paper. The techniques can be arranged within a continuum between the poles of indicativity and predicativity.
5. The principles governing these two processes are explained in further detail in Bisang 1991 and Bisang 1992.
6. According to Wurm 1982, Hua is a Papua New Guinea language from the East New Guinea Highlands Stock (East-Central Family, Kamano Sub-Family).
7. AS = Anticipatory Subject.
8. The basic difference between the *-te* form and the *-i* form is, according to Hinds 1986: 85–86, that coordination with the verbal stem [i. e., *-i*] indicates a more formal or prepared expression than coordination with the participle. Therefore, coordination with the verbal stem occurs more frequently in planned or nonspontaneous discourse while coordination with the participle [i. e., *-te*] occurs more frequently in unplanned or spontaneous discourse.
[Also cf. Hinds 1976]. Furthermore, the *-te* form has the connotation of "V and then", which is not the case with *-i* (cf. Kuno 1973: 195).
"Another difference between the *-te* form and the *-i* form is that, for the former, the two actions involved must be either both self-controllable or both non-self-controllable, while such a constraint does not seem to hold for the *-i* form." (Kuno 1973: 196)

- For a discourse-pragmatic approach to the difference between *-te* and *-i*, cf. Myhill and Hibiya 1988 and Ono 1990.
9. Pullum 1990 calls these constructions “intransitive quasi-serial verb constructions” in his paper. His examples, however, fit perfectly well into the definition of verb serialization given in section 2.1.
 10. I owe this example to a paper entitled “Die Faszination der Leere” presented by D. Weiss at the University of Zurich in November 1991.
 11. According to Wurm 1982, Alamblak belongs to the Sepik Hill Stock of the Sepik Super-Stock of the Sepik Subphylum of the Sepik-Ramu Phylum, Yimas belongs to the Pondo Family of the Nor-Pondo (Lower Sepik) Stock, which possibly belongs to the Sepik-Ramu Phylum, and Kalam belongs to the Kalam Family of the West Central Family of the East New Guinea Highlands Stock of the Trans-New Guinea Phylum.
 12. According to Wurm 1982, Dani belongs to the Dani-Kwerba Stock situated in the Highlands of Irian Jaya.

References

- Akanni, Ige
1980 “Emploi des morphèmes verbaux et expression de l’aspect en Yoruba”, *Cahiers Ivoires de Recherche Linguistique (CIRL)* 8: 85–114.
- Awobuluyi, Oladele
1978 *Essentials of Yoruba grammar*. Ibadan: Oxford University Press.
- Awoyale, Y.
1987 “Perspectives on verb serialization”, *Niger-Congo Syntax and Semantics* 1: 3–36.
- Bamgboṣe Ayo
1974 “On serial verbs and verbal status”, *Journal of West African Languages* 9 (1): 17–48.
1986 “Reported speech in Yoruba”, in: Florian Coulmas (ed.), *Direct and indirect speech*, Berlin–New York–Amsterdam: Mouton de Gruyter, 77–97.
- Bertrais-Charrier, Fr. Yves
1979 *Dictionnaire Hmong (Mèo Blanc)–Français*. Bangkok: Assumption Press.
- Bickel, Balthasar
1991 *Typologische Grundlagen der Satzverkettung (Ein Beitrag zur allgemeinen Grammatik der Satzverbindung und des Führtenlegens)*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich, 9.) Zürich.
- Bisang, Walter
1986 “Die Verb-Serialisierung im Jabêm”, *Lingua* 70: 131–162.
1991 “Verb serialization, grammaticalization and attractor positions in Chinese, Hmong, Vietnamese, Thai and Khmer”, in: H. Seiler–W. Premper (eds.), 509–562.
1992 *Das Verb im Chinesischen, Hmong, Vietnamesischen, Thai und Khmer (Vergleichende Grammatik im Rahmen der Verbserialisierung, der Grammatikalisierung und der Attraktorpositionen)*. Tübingen: Narr.
- Bisang, Walter–Peter Rinderknecht
1991 *Von Europa bis Ozeanien – von der Antonymie zum Relativsatz, Gedenkschrift für Meinrad Scheller*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich, 11.) Zürich.

- Bradshaw, Joel
1979 "Obstruent harmony and tonogenesis in Jabêm", *Lingua* 49: 189–205.
1980 "Dempwolff's description of verb serialization in Yabem", *University of Hawaii Working Papers in Linguistics* 12(3): 1–26.
- Brecht, Richard D.
1976 "The Russian verbal adverb: A case study of grammar change", in: Ladislav Matejka (ed.), *Sound, sign, and meaning: Quinquagenary of the Prague Linguistic Circle*. (Michigan Slavic contributions, 6.) Ann Arbor: University of Michigan, 271–290.
- Bromley, H. M.
1981 *A grammar of Lower Grand Valley Dani*. (Pacific Linguistics, C. 63.) Canberra: Australian National University.
- Broschart, Jürgen
1991 "On the sequence of the techniques on the dimension of PARTICIPATION", in: H. Seiler–W. Premper (eds.), 29–61.
- Bruce, Les
1984 *The Alamlak language of Papua New Guinea (East Sepik)*. (Pacific Linguistics, C. 81.) Canberra: Australian National University.
1988 "Serialization: From syntax to lexicon", *Studies in Language* 12: 19–50.
- Byrne, Francis
1987 *Grammatical relations in a radical Creole: Verb complementation in Saramaccan*. Amsterdam: John Benjamins.
- Chao, Yüan Ren
1968 *A grammar of spoken Chinese*. Berkeley–Los Angeles: University of California Press.
- Clark, Marybeth
1978 *Coverbs and case in Vietnamese*. (Pacific Linguistics B. 48.) Canberra: Australian National University.
- Crowley, Terry
1987 "Serial verbs in Paamese", *Studies in Language* 11 (1): 35–84.
- Déchaine, Rose-Marie
1990 *The syntactic and semantic headedness of serial verb constructions*. [Unpublished manuscript, University of Massachusetts, Amherst.]
- DeLancey, Scott
1991 "The origin of verb serialization in Modern Tibetan", *Studies in Language* 15 (1): 1–23.
- Dempwolff, Otto
1939 *Grammatik der Jabêm-Sprache auf Neuguinea*. Hamburg: Friedrichsen, de Gruyter.
- Durie, Mark
1988 "Verb serialization and 'verbal prepositions' in Oceanic languages", *Oceanic Linguistics* 27: 1–23.
- Ebert, Karen H.
1991 "Vom *verbum dicendi* zur Konjunktion – Ein Kapitel universaler Grammatikentwicklung", in: Walter Bisang–Peter Rinderknecht (eds.), 77–95.
- Ekundayo, S. A.–F. N. Akinnaso
1983 "Yoruba serial verb string commutability constraints", *Lingua* 60: 115–133.
- Foley, William A.
1986 *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.
- Foley, William A.–Robert D. Van Valin Jr.
1984 *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- George, Isaac
1976 "Verb serialization and lexical decomposition", *Studies in African Linguistics* (supplement) 6: 63–72.

- Givón, Talmy
1975 "Serial verbs and syntactic change: Niger-Congo", in: Charles N. Li (ed.), *Word order and word order change*. Austin—London: University of Texas Press, 113–147.
- Grønbech, Kaare
1936 *Der türkische Sprachbau*. Kopenhagen: Levin—Munksgaard.
- Grønbech, Kaare—John R. Krueger
1955 *An introduction to classical (literary) Mongolian*. Wiesbaden: Harrassowitz.
- Haiman, John
1985 "Symmetry", in: John Haiman (ed.), *Iconicity in Syntax*. Amsterdam—Philadelphia: John Benjamins, 73–95.
- Hinds, John
1976 "A taxonomy of Japanese discourse type", *Linguistics* 184: 45–54.
1986 *Japanese* (Croom Helm descriptive grammars series.) London—New York: Routledge.
- Hopper, P. J.—Sandra A. Thompson
1980 "Transitivity in grammar and discourse", *Language* 56: 251–299.
- Huang, C. T. James
1984 "On the distribution and reference of empty pronouns", *Linguistic Inquiry* 15(4): 531–574.
- Ilijic, Robert
1987 *L'exploitation aspectuelle de la notion de franchissement en chinois contemporain*. Paris: Editions l'Harmattan.
- Jansen, Bert—H. Koopman—P. Muysken (eds.)
1978 *Serial verbs in the Creole languages*. (Amsterdam Creole Studies II.) Amsterdam: University of Amsterdam, Instituut voor Algemene Taalwetenschap.
- Johanson, Lars
1977 "Some remarks on Turkic 'hypotaxis'", in Gyula Décsy—Christo D. Dimov-Bogoev (eds.), *Eurasia Nostratica, Festschrift für Karl Heinrich Menges*, Vol. I. Wiesbaden: Harrassowitz, 107–129.
- Jorden, Eleanor H.
1963 *Beginning Japanese*. New Haven: Yale University Press.
- Joseph, Brian D.—Arnold M. Zwicky (eds.)
1990 *When verbs collide: Papers from the 1990 Ohio State mini-conference on serial verbs*. Ohio State University: Department of Linguistics.
- Kölver, Ulrike
1991 "Lexical prepositions and serial verb constructions in Thai", in: H. Seiler—W. Premper (eds.), 485–508.
- König, Ekkehard—Johan van der Auwera
1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert—Giuliano Bernini—C. Buridant (eds.), *Toward a typology of European languages*. (Empirical Approaches to Languages Typology, 8.) Berlin: Mouton de Gruyter, 337–355.
- Kortmann, Bernd
1988 "Freie Adjunkte und absolute Konstruktionen im Englischen und Deutschen", *Papiere zur Linguistik* 38: 61–89.
- Kuhn, Wilfried
1990 *Untersuchungen zum Problem der seriellen Verben (Voriüberlegungen zu ihrer Grammatik und exemplarische Analyse des Vietnamesischen)*. Tübingen: Max Niemeyer.

- Kuno, Susumu
1973 *The structure of the Japanese language*. Cambridge–Massachusetts–London: MIT Press.
- Lawal, Nike
1985 “Why verbs do not gap in Yoruba”, *Journal of African Languages and Linguistics* 7: 155–162.
- Lehmann, Thomas
1989 *A grammar of modern Tamil*. Pondicherry: Pondicherry Institute of Linguistics and Culture.
- Li, Charles N.–Sandra A. Thompson
1973 “Serial verb constructions in Mandarin Chinese: Subordination or co-ordination?”, in: Claudia Corum–Cedric Smith-Stark–Ann Weiser (eds.), *You take the high node and I’ll take the low node*. (Chicago Linguistic Society 9.) Chicago: Chicago Linguistic Society, 96–103.
1981 *Mandarin Chinese (a functional reference grammar)*. Berkeley–Los Angeles–London: University of California Press.
- Lord, Carol
1973 “Serial verbs in transition”, *Studies in African Linguistics* 4: 269–295.
1976 “Evidence for syntactic reanalysis: From verb to complementizer in Kwa”, in: *Papers from the parasession on diachronic syntax*. Chicago: Chicago Linguistic Society, 179–191.
- Martin, Samuel
1975 *A reference grammar of Japanese*. New Haven: Yale University Press.
- Masica, Colin P.
1976 *Defining a linguistic area*. Chicago–London: University of Chicago Press.
- Matisoff, James A.
1969 “Verb concatenation in Lahu: The syntax and semantics of ‘simple’ juxtaposition”, *Acta Linguistica Hafniensia* 12 (1): 69–120.
- Matisoff, James A.
1973 *The grammar of Lahu*. Berkeley–Los Angeles–London: University of California Press.
- McLuhan, M.
1964 *Understanding media: The extensions of man*. New York: McGraw-Hill.
- Myhill, John–Junko Hibiya
1988 “The discourse function of clause-chaining”, in: John Haiman–Sandra A. Thompson (eds.), *Clause combining in grammar and discourse*. Amsterdam/Philadelphia: Benjamins, 361–398.
- Needleman, Rosa
1973 *Tai verbal structures and some implications for current linguistic theory*. [Unpublished Ph.D. dissertation, University of California, Los Angeles.]
- Nedjalkov, Vladimir P.
this volume “Some typological parameters of converbs”.
1971 *Kokusai gakuyunkai Nihongo gakko* (ed.) [International Alumni Association of the Japanese School] *Nihongo tokuhon* [Japanese reader]. Vol. 4. (5th edition.) Tokyo: Dainihon Insatsu Kabushiki Kaisha.
- Ono, Tsuyoshi
1990 “Te, I and Ru clauses in Japanese recipes: A quantitative study”, *Studies in Language* 14 (1): 73–92.
- Ore, Yusuf
1987 *Verb phrase serialization in Yorùbá in discourse perspective*. [Unpublished dissertation, University of California.]

- Owensby, Laurel
1986 "Verb serialization in Hmong", in: Glenn L. Hendricks—Bruce T. Downing—Amos S. Deinard, *The Hmong in transition*, New York: Center of Migration Studies of New York and SE Asian Refugee Studies Project of the University of Minnesota, 237–243.
- Oyelaran, Olosopo O.
1982 "On the scope of the serial verb construction in Yoruba", *Studies in African Linguistics* 13(2): 109–146.
- Pawley, Arthur
1973 "Some problems in Proto-Oceanic grammar", *Oceanic Linguistics* 12: 103–188.
- Poppe, Nicholas
1970 *Mongolian language handbook*. Washington: Center of Applied Linguistics.
- Pullum, Geoffrey K.
1990 "Constraints on intransitive quasi-serial verb constructions in modern colloquial English", in: Joseph—Zwicky (eds.), 218–239.
- Quinn, Charles
1990 "Suffixal concatenation in the classical Japanese predicate: Erstwhile serial verbs?", in: Joseph—Zwicky (eds.), 247–264.
- Rappaport, Gilbert C.
1984 *Grammatical function and syntactic structure: The adverbial participle of Russian*. (UCLA Slavic Studies, 9.) Columbus, Ohio: Slavica.
- Rowlands, E. C.
1969 *Yoruba*. Teach Yourself Books. Kent: Hodder and Stoughton.
- Schiller, Eric
1990 "The typology of serial verb constructions", *Chicago Linguistic Society* 26 (1).
- Sebba, Mark
1987 *The syntax of serial verbs* (Creole language Library 2.) Amsterdam—Philadelphia: John Benjamins.
- Seiler, Hansjakob
1988 *Die universalen Dimensionen der Sprache: Eine vorläufige Bilanz*. (Arbeiten des Kölner Universalien-Projekts, 75.) Köln: Universität Köln.
- Seiler, Hansjakob and Waldfried Premper (eds.)
1991 *PARTIZIPATION. (Das sprachliche Erfassen von Sachverhalten)*. Tübingen: Narr.
- Shibatani, Masayoshi
1976 "The grammar of causative constructions: A conspectus", in: *Syntax and semantics: The grammar of causative constructions*, Vol. 6. New York—San Francisco—London: Academic Press, 1–40.
- Sperber, Dan and Deirdre Wilson
1986 *Relevance: Communication and cognition*. Oxford: Basil Blackwell.
- Stahlke, Herbert
1970 "Serial verbs", *Studies in African Linguistics* 1: 60–99.
- Steever, Sanford B.
1989 *The serial verb formation in the Dravidian languages*. Delhi: Motilal Banarsidass.
- Street, John C.
1963 *Khalkeba structure*. (Research and Studies in Uralic and Altaic languages, Project No. 25.) Bloomington: Indiana University.
- Thompson, Laurence C.
1965 *A Vietnamese grammar*. Seattle—London: University of Washington Press.

Vichit-Vadakan, Rasami

- 1976 "The concept of inadvertence in Thai periphrastic causative constructions", in: M. Shibatani (ed.), *The grammar of causative constructions*. (Syntax and Semantics 6.) New York: Academic Press, 459–476.

Vietze, Hans-Peter

- 1974 *Lehrbuch der mongolischen Sprache*. Leipzig: VEB Verlag Enzyklopädie.

Wurm, S. A.

- 1982 *Papuan languages of Oceania*. (Ars Linguistica 7.) Tübingen: Narr.

Yamaguchi, Seiko Fujii

- 1989 "Concessive conditionals in Japanese: A pragmatic analysis of the S1-temo S2 construction", *Proceedings of the 15th Annual Meeting of the Berkeley Linguistics Society*, 291–302.

Zahn, Heinrich

- 1940 *Lehrbuch der Japân-Sprache*. (Beiheft zur Zeitschrift für Eingeborenen-Sprachen 21.) Berlin: Dietrich Reimer.

Zhuangzi jishi

- 1961 *Zhuangzi jishi* [Collected explanations of Zhuangzi], *xinbianzhuji jicheng* [Newly compiled compendium of all the (Chinese) philosophers.] 4 Vols. Beijing: Zhonghua Shuju.

Adverbial participial clauses in English

Bernd Kortmann

1. Introduction

1.1. Plan of discussion

Among the Germanic languages English stands out as the language making the most extensive use of nonfinite and verbless adverbial clauses if compared with the proportion of finite clauses introduced by an adverbial conjunction. Clauses of the former type have gone by different names in the literature on English.¹ In the following I will employ two well-established terms: *free adjuncts* for clauses as in (1) and *absolute constructions* (short: *absolutes*) for clauses as in (2), the difference between the two construction types being the presence of an overt subject in the latter.

(1) *I checked my diary and rushed off to my 9 am lecture, managing to skip breakfast.*

(2) *The Dean turned and went out, his gown billowing darkly behind him.*

In many respects (1) and (2) exemplify prototypical free adjuncts and absolutes in English. First and foremost they are formed with a present participle (90 percent of all instances in a corpus of approximately 1700 constructions). Indeed, adding to these all constructions formed with a past participle (*walked*) or a “perfect” participle (*having walked*), the proportion of participial free adjuncts and absolutes goes up to 93 percent. This explains why the natural focus of this paper is on adverbial participial clauses (short: adverbial participles). The two examples are further prototypical in that they exhibit detachment from the matrix clause (which need not be a main clause) via a pause and a clause-final intonation contour, which is usually indicated by a comma in writing. Thirdly, two in three free adjuncts and four in five absolutes follow the clause they modify (see Table 4 in section 2.3). Fourth, the empty subject position of the adjunct in (1) is controlled by the matrix subject; this holds for more than 90 percent of all free adjuncts in the corpus. The subject referent of the majority of English absolutes, on the other hand, stands in a (roughly speaking) part-whole relationship to the referent of the matrix subject, as in (2). Finally, free adjuncts are very rarely, absolutes never introduced by adverbial conjunctions.

Drawing its observations and results from a large-scale empirical study (Kortmann 1991 a), this paper wants to go beyond a mere survey of constructional possibilities, the applicability of specific syntactic operations, and possible interpretations. Its basic contention is that, on the one hand, an in-depth account of the use of free adjuncts and absolutes in a single language helps to put in perspective observations and claims in the typological literature concerning the characteristics of converbs in this language and, more importantly, converbs in general. On the other hand, a study like this allows one to make predictions and to formulate tentative universals with respect to semantic-pragmatic properties of different types of converbs and their predictability from higher order iconic and pragmatic principles.

The paper is organized into four parts. Section 2 will be concerned with syntactic issues (head structure, related but different constructions, syndesis), while sections 3 and 4 will be devoted exclusively to semantic and pragmatic questions. Section 3 inquires into the referential nature of the subjects of free adjuncts and absolutes, and section 4 provides an account of the interpretation of these constructions. In all three sections, those parameters of variation that have been suggested in recent typological studies on converbs, adverbial participles, etc. (especially in König-van der Auwera 1990, Nedjalkov (this volume) and Stassen 1985) will play an important role. In section 5 the major results of this study will be summarized, with a special focus on how English adverbial participial clauses fare in a typological perspective.²

1.2. Frequency of use

By way of introduction, a few cautionary remarks seem necessary with regard to general statements on the frequency of use of free adjuncts and absolutes in English and other languages. Consider, for instance, statements like “there are languages that use it [the adverbial participle] *quite frequently*, whereas others *seem* to have very little use for it”, or that these constructions “are also *quite common* in more formal, especially written, registers of Russian, Romance and English.” (König-van der Auwera 1990: 348–349; my emphasis) For languages that do not use these constructions exclusively or almost exclusively in adverbial subordination, such statements capture for the most part little more than rough tendencies, “of which many of us may be already impressionistically aware” (Masica 1976: 129). The reason is that reliable distributional analyses based on text material that can claim at least a minimum of representativeness – both regarding size and composition of the analyzed texts – exist only for very few of these languages. As the figures for English in Table 1 reveal, it does not do, for example, to simply contrast written and spoken language. Of course it does not

come as a surprise that free adjuncts and absolutes are dispreferred in conversation (London-Lund corpus); much more importantly, there are significant differences between different types of written discourse.

Table 1. Distribution among different types of discourse

	Free adjuncts	Absolutes
Fiction 150 000 words	913 (60.9) ^a	157 (10.5)
News 100 000 words	265 (26.5)	50 (5)
Science 50 000 words	83 (16.6)	20 (4)
Conversation 150 000 words	151 (10.1)	42 (2.8)
Total (1681 = 100%)	1412 (84%)	269 (16%)

Note: ^a Numbers in parentheses are the frequencies per 10 000 words.

The sharp contrast between narrative texts (novels, short stories) and texts taken from newspapers and scientific literature confirms that it is the *depictive* versus *nondepictive* distinction which is relevant to the token frequency of free adjuncts and absolutes among written registers, and not the distinction between formal and informal discourse (cf. Thompson 1983: 45–47 and 1984: 91–93). In other languages of the kind mentioned above similar differences are very likely to be observed, too. As a factor of prime importance such differences must therefore be taken into consideration in the composition of the text material serving as the basis for trustworthy cross-linguistic comparisons and generalizations. Another factor not to be neglected is the amount of the material to be analyzed. Views may differ as to what constitutes the lower limit of an ideal text sample. There should be agreement, however, that making frequency counts in a text of 7500–8000 words length for each language the basis for cross-linguistic generalizations can hardly qualify as more than a very first step; especially, if these texts are of a most idiosyncratic sort, i. e., represent archaic and stylistically highly marked usage, like the translations of a bible passage that Masica (1976: 129–134) examines in twelve languages.

Two further questions one should keep in mind when judging statements on the frequency of use of adverbial participles, converbs, etc., are: What are the competing constructions serving as the standard of comparison, and what do we know about *their* token frequency? Nedjalkov (this volume) distinguishes three major syntactic functions fulfilled by converbs: (i) as an adverbial in a

simple sentence (*converb proper*); (ii) as a coordinate predicate in a complex sentence (*coordinative converb*); (iii) as the predicate of a subordinate clause (*conjunctive converb*). It is obvious that in judging the relative frequency of these three types of converbs in a given language different competing constructions must be considered for each of them respectively: for (i) simple adverbs and more complex adverbials lacking clause-status; for (ii) (syndetically or asyndetically linked) coordinate clauses; for (iii) finite adverbial subordinate clauses (involving an adverbial conjunction). For the purposes of the present paper it is, of course, (iii) that is central.³ And here it turns out that stating that English exhibits a predilection for the use of free adjuncts and absolutes must not be understood as a regularly observable higher relative frequency compared with finite adverbial clauses. On a cursory check of text chunks of different length from novels, newspaper articles, scientific literature, and conversation transcripts, totalling 10 000 words for each type of discourse, it emerges that finite adverbial clauses still represent the primary means of adverbial subordination in English (cf. also Biber 1988: 247–269). Most clearly this is the case in (overwhelmingly informal) conversation, where the ratio “finite vs. non-finite/verbless adverbial clauses” is 5.6:1. The ratios for the different types of written discourse are all considerably lower than this (science 1.8:1, fiction 1.5:1, news 1.1:1), but nevertheless finite clauses hold the majority or at least an equal share in all of them. This, on the one hand, is a further proof of the fact that English is not a converb language, as can also be seen from the fact that it has, in contrast to prototypical converb languages (cf. V. Nedjalkov and Bisang, both in this volume), a large inventory of adverbial conjunctions. On the other hand, it is not a typical “conjunction language” either (cf. Nedjalkov, this volume): at least in the written language, free adjuncts are far from playing a minor role. This is exactly what makes English different from all other Germanic languages (cf., for example, Einarsson (1949: 163) on Icelandic), with the possible exception of Yiddish (cf. Masica 1976: 124). To give a rough idea of how to quantify this difference: a comparison of the text frequency of adverbial participial clauses in English and German narrative texts on the basis of Kortmann (1991 a) and Filipović (1977) yields the result that, on average, English employs five times as many of these constructions per 10,000 words as German does.⁴

2. Structural variation

2.1. Head structure

All major lexical categories (i.e., nouns, verbs, adjectives, adverbs, and prepositions) or expansions thereof may serve as heads of free adjuncts and the predicative element of absolutes. The various possibilities are sketched in Figure 1 and illustrated in sentences (1) down to (16).

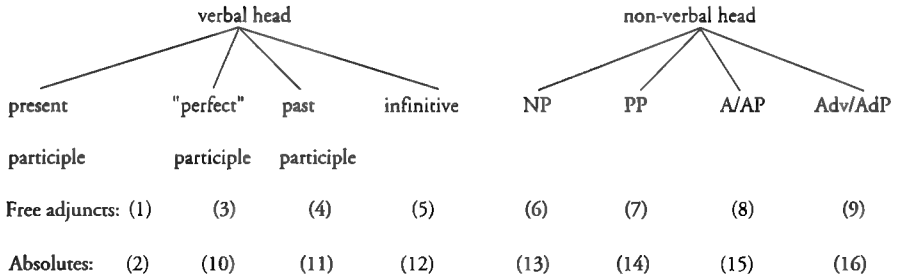


Figure 1. Predicative heads of free adjuncts and absolutes^a

Note: ^a McCawley (1983: 275–276) points out that temporal and epistemic adverbs (e.g., *currently*, *probably*, *evidently*, *still*) which normally cannot occur as constituents of APs, PPs, or NPs may accompany the non-verbal heads of the predicative element of absolutes.

- (1) *I checked my diary and rushed off to my 9 am lecture, managing to skip breakfast.*
- (2) *The Dean turned and went out, his gown billowing darkly behind him.*
- (3) *Having arrived at this neat if somewhat abstract conclusion, he felt better.*
- (4) *Toppled from office in last month's military coup, Mr Bavadra has arrived in London ...*
- (5) *To continue trading the shares, investors need to have new certificates issued in exchange for the payment.*
- (6) *A virtuoso in the art of the discourteous aside, he had never been subjected to such disrespect.*
- (7) *"..." Litvak conceded, in a voice no louder than a sigh.*
- (8) *Alone in Zipser's room, Mrs Biggs switched on the vacuum cleaner.*
- (9) *Back in her office in the executive suite, Christine looked briefly into Warren Trent's, ...*
- (10) *Rivens and I had a great trial of strength at the beginning of this year, everybody else having gone except me ...*
- (11) *The pre-election campaign of strikes in schools by teachers is expected to reach a peak today, with thousands of children sent home.*

- (12) *And each year they would part amicably, Frensic to wonder at the man's incredible perseverance and Piper to start work in a different seaside town ...*
(Tom Sharpe, *The Great Pursuit*. London: Pan, 1979, pp. -10)
- (13) *He looked towards the Presidential Suite, his expression a mixture of anxiety and resentment ...*
- (14) *A hand on his cheek, Dixon said, "..."*
- (15) *Christine sipped her drink, her expression pensive.*
- (16) *With midnight an hour away, it was early yet for the Quarter.*

Free adjuncts and absolutes are generally unmarked for tense and mood; the aspectual distinction "progressive/nonprogressive" is neutralized except for perfect-participial constructions. The latter are marked for "perfect aspect", or rather "anterior orientation" (cf. Kortmann 1991 b), and can additionally, just like past-participial clauses as in (11) or (17), be marked for passive voice (18) as well as, most exceptionally, "progressive aspect" (19):⁵

- (17) *Boston were able to subdue the Lakers' fast break —...— with Earvin "Magic" Johnson, Kareem Abdul-Jabbar and James Worthy being held in check.*
- (18) *I still have to be rather careful, having been, sort of, totally buggered for years on end.*
- (19) *... and of course I was tired, having been working during the night anyway.*

These are the options English grammar allows as predicative heads of free adjuncts and absolutes and for their combinability with other verbal grammatical categories. It is however only a very limited range of structural possibilities from which the overwhelming majority of these clauses is constructed. As becomes clear from Table 2, 93 percent of the constructions in the corpus are participial clauses, the overwhelming majority of which (95.5 percent) have a present participle. Non-verbal heads are clearly dispreferred, though noticeably less so in absolutes than in free adjuncts. Moreover, passive constructions are extremely rare, perfect-participial clauses marked for the progressive as well as infinitival absolutes virtually nonexistent.

2.2. The English adverbial participle: A tetrafunctional converb

If it had needed further proof, Table 2 clearly confirms that it is the *ing*-form which represents the prototypical English converb. In this section I will consider the various functions of this virtually omnipresent form in English grammar, with a focus on environments in which the differences between certain func-

Table 2. Verbal versus non-verbal heads

	Free adjuncts (n = 1412)	Absolutes (n = 269)
non-verbal	4.7%	11.5%
<i>present participle</i>	89.9%	83.6%
perfect participle	2.9%	1.9%
past participle	1.1%	3.0%
infinitive	1.4%	—

tions are neutralized, or at least blurred. In the first place, this will involve a discussion of the participle-gerund distinction as well as of *ing*-constructions whose exact status relative to adverbial participial clauses is not always clear.

Following Nedjalkov (this volume), the English form in *-ing* belongs to that group of converbs which, cross-linguistically, exhibit the highest degree of syntactic plurifunctionality. As it is not confined to converb function, it qualifies as a quasi converb, more exactly a tetrafunctional one additionally fulfilling the functions of participle, infinitive and gerund. The only function it is denied is that of a finite verb. As a participle, the *ing*-form can be used for noun modification, either in attributive position (20 a) or as a postmodifier in restrictive relative clauses (20 b), or, together (!) with forms of *to be*, as the only predicate of a simple sentence (indicating progressive aspect), as in (20 c). It can be used like an infinitive in certain patterns of verb complementation (21), and qualifies as a gerund (nominal verb) when it occupies the position of a nominal actant, as in (22):⁶

- (20) a. *A smoking girl entered the room.*
 b. *A girl smoking a cigarette entered the room.*
 c. *A girl was smoking in the room.*
- (21) *The girl started smoking (= to smoke) a cigarette.*
- (22) *The girl's smoking irritated me.*

If we further follow Nedjalkov in making the relative text frequency of the individual functions the all-important criterion for deciding on the main function, then it is fairly safe to say that, in English, this is the function of the participle in primary predications like (20 c).⁷

The individual functions of the *ing*-form or the construction it occurs in cannot always be distinguished easily from each other. I will consider four such problematic cases: (i) the distinction participle vs. gerund in clauses serving as verbal arguments, as well as the distinction between adverbial participles and (ii)

participial complements, (iii) adverbial gerunds, and (iv) nonrestrictive relative clauses.

2.2.1. The case of the "half-gerund"

The *ing*-constructions in (23) are notorious examples illustrating the nondiscreteness of the distinction between participle and gerund. They all represent instances of what Quirk et al. (1985: 1063–1067) rather loosely call *nominal ing-clauses*, or what older traditional grammars have referred to as *half-gerunds* (e.g., Sweet 1898: 121):

- (23) a. *Women having the vote reduces man's political power.* (Curme 1931: 157)
 b. *It is vilely unjust, men closing two-thirds of the respectable careers to women.* (Curme 1931: 157)
 c. *Our children hate John singing folk songs.*
 d. *Our children saw John singing folk songs.*
 e. *Our children saw him singing folk songs.*

Roughly speaking, the *ing*-form in these constructions has received either "all-gerund" or "all-participle" analyses. Many traditional grammars adduce as the main reason for a gerundial analysis that for each of the sentences in (23) a stylistically more formal variant can be set up in which the former subject of the nominal clause and its predicate are brought into a possessor-possessed relationship. Accordingly, the *ing*-form in (23'), now serving the function of a nominal actant, is standardly ascribed gerund-status:

- (23') a. *Women's having the vote reduces man's political power.*
 b. *It is vilely unjust, men's closing two-thirds of ...*
 c. *Our children hate John's singing folk songs.*
 d. *?Our children saw John's singing folk songs.*
 e. *?Our children saw his singing folk songs.*

Proponents of an all-participle analysis in (23) fall into two groups: the radicals and the moderates. Essentially, the moderates (e.g., Ihms 1981) accept the gerund analysis in (23'), but refuse to let this analysis influence their classification of the *ing*-form in (23), arguing that the two construction types must be viewed independently of each other. The minority of radicals (Quirk et al. 1985), on the other hand, do not even subscribe to the gerund-analysis in (23'), treating these *ing*-forms, too, as participles.⁸

The sentences in (23) lead on to a further problem. While it is undebated that the *ing*-clauses in (23 a) and (23 b) must be treated as units fulfilling a nominal (subject) function, this is increasingly unclear in their *object nexus* use (König-van der Auwera 1991: 347) in (23 c) down to (23 e).⁹ Example (23 c) contrasts

with (23 d) and (23 e) on both syntactic and semantic grounds. Semantically, in that it does not entail *our children hate John* whereas (23 d) does entail *our children saw John*, and that the participle in (23 d) and (23 e) generally has a progressive meaning. Also, there are complementary sets of verbs allowing as tensed predicates *ing*-constructions as in (23 c) and (23 d–e) respectively: The latter are found with a considerably smaller group of verbs than (23 c), most frequently with verbs of perception like *see, hear, feel, spot, smell*, etc. (cf. Quirk et al. 1985: 1194–1195, 1206–1207). The most important syntactic difference is that only (23 d–e) may be passivized, but not (23 c) (cf. also van der Auwera 1990: 265):

- (23") c. **John was hated singing folk songs.*
 d. *John was seen singing folk songs.*
 e. *He was seen singing folk songs.*

This suggests that in (23 c) *John singing folk songs* as a whole still fulfils object function. In (23 d), however, and even more so in (23 e) it is increasingly difficult to defend an analysis of this construction as a single unit. Ihms (1981: 206–207), for example, can only justify his analysis of these constructions as participial constructions with their own subject by assuming a process of syntactic reanalysis parallel to the one observable for infinitives or infinitival clauses that are in construction with an object (24 a) or a complement of the preposition *for*, as in (24 b) and, especially remarkable, in (24 c):

- (24) a. *We cannot force them to leave.*
 b. *We waited for them to leave.*
 c. *He wants for me to go with him.* (American English; Quirk et al. 1985: 1062)

Van der Auwera (1990: 264) assumes the opposite development, i. e., a process of subject-to-object raising. It is no longer the “NP V-*ing* NP” construction as a whole that is considered to serve as an argument of the main verb, but only the first noun phrase. The participle has been syntactically downgraded as it were: from a secondary predication of a secondary subject in a sentential noun phrase fulfilling an argument role in the primary predication (i. e., from predicate of object clause) to a secondary predication of a primary predication argument (i. e., to object complement).¹⁰

It should be noted that the latter syntactic analysis is only one of several possible ones of the syntactically ambiguous constructions in (23 d) and (23 e). It may be the most natural one if contrasted with (23 c). In principle, however, such constructions allow two further analyses, especially if the noun phrase preceding the participle is neither a proper name nor a pronoun, as in (25): as

a postmodifying (restrictive relative) clause (26 b) and as an adverbial participle (26 c):

(25) *Mary spotted an old man catching flies.*

- (26) a. *'Mary spotted an old man in the act of (or: as he was) catching flies.'* [object complement]
 b. *'Mary spotted an old man who was catching flies.'*
 c. *'Mary spotted an old man as/while she was catching flies.'*

2.2.2. *Adverbial participle vs. participial complement*

Participial constructions allowing for multiple syntactic analyses including that of an adverbial participle generally exhibit two characteristics: they are in sentence-final position and they are nondetached. Indeed, constructions as in (25) do not pose the greatest problems in this respect, the analysis in (26 c) clearly being a rather strained one out of context. Much more intricate are the problems caused by constructions as in (27), which in many cases may best be glossed by means of two *and*-coordinated tensed predicates (cf. van der Gaaf in Jespersen 1940):

- (27) a. *Mary left smiling.*
 b. *He stood in the darkness panting.*
 c. *I held my breath listening.*

The participle, typically standing by its own, immediately follows the tensed predicate and shares (or rather: is controlled by) its subject, thus becoming an even more integrative part of the primary predication compared with its function as object complement discussed at the end of the preceding section. Such participles look almost like manner adverbs, although it is usually not the manner of the main predication that they specify but some independent, contemporaneous activity.

From a typological point of view, the *ing*-forms in (27) come closest to Nedjalkov's *converbs proper* (i. e., converbs that function as adverbials in a simple sentence and cannot have a subject different from the subject of the superordinate predicate), although the criteria and the examples he gives for the distinction of this type of converbs from conjunctive converbs are not uncontroversial. The former represent hardly more than a subclass of the latter, unless one finds additional distinguishing criteria. Two candidates for such additional criteria are detachment of the converb, as indicated by an intonation break and independent intonation contours of the main predication and the converb, and, connected with this, the number of information focuses the sentence has (cf. Quirk et al. 1985: 1126). Contrast on the latter criterion the examples in (27) with those in (28), all of which are authentic:

- (28) a. *He waved back at her, smiling.*
 b. *He stopped, panting.*
 c. *I dashed for the farthest corner, screeching.*

But even if we make detachment the all-important formal criterion for drawing a distinction between converb proper and (subjectless) conjunctive converb, or verb complement and (subjectless) adverbial participle, the fact remains that the constructions in (27) do not differ from those in (28) with regard to their interpretation. Especially on comparing (27 b) with (28 b) one can see that the insertion of a comma as detachment marker appears to depend on individual preferences, thus rendering the detachment criterion as a whole rather arbitrary, at least when applied to written data. In English, we conclude, there is no hard and fast way of keeping distinct, out of context, nondetached adverbial participles in sentence-final position from participles serving as complements.¹¹

An important semantic issue must not go unnoticed. Whether participial or gerundial (see the following section), whether finite, nonfinite or verbless, whether introduced by an adverbial conjunction or not, nondetached adverbial clauses in sentence-final position can generally be within the scope of scope-bearing elements in the matrix clause (e.g., negation, *yes/no*-questions, focus particles, speech act verbs) and can explicitly be focused. Compare, for instance, the examples in (29) and their counterparts in (30) exhibiting contrastive negation connected with a sentence-final rising intonation:

- (29) a. *I left smiling.*
 b. *I got angry on hearing that Sheila had left.*
 c. *I got angry when hearing that Sheila had left.*
 d. *I got angry when I heard that Sheila had left.*
- (30) a. *I didn't leave smiling.* (I left, but I wasn't smiling.)
 b. *I didn't get angry on hearing that Sheila had left.* (I got angry, but this had nothing to do with Sheila's leaving.)
 c. *I didn't get angry when hearing that Sheila had left.* (ditto)
 d. *I didn't get angry when I heard that Sheila had left.* (ditto)

2.2.3. Two types of detached adverbial *ing*-clauses: adverbial participle vs. adverbial gerund

In this and the next section it will be shown that neither the predicative function of the *ing*-form nor the detachment of the adverbial construction it occurs in prevent problems of delimiting adverbial participles from other constructions. Consider, for example, the constructions in (31) to (33), where it is the word class of the augmenting element alone which determines the classification of the *ing*-form as a participle or a gerund:

- (31) a. *On learning of the decision, his first reaction had been surprise.*
 b. *In aiming for such a theory, I shall begin with a number of interrelated assumptions.*
 c. *By enacting p, Ad will get just what he not wanted ... But by conforming to Gricean maxims, Ad will readily ... rise into a "fallacious" invited inference.*
- (32) a. *After fighting the Vichy French for a bit, we got sent to Baghdad.*
 b. *Before coming here, I was an assistant manager at the Waldorf.*
 c. *Since leaving the sea, he had overseen the installation.*
- (33) a. *When feeling weak, you should take an aspirin.*
 b. *While waiting for his nurse, the doctor was pacing the room.*
 c. *Although feeling tired, he decided against a rest.*

Judging on the basis of their intonation contour, the way their implied subject as well as their relative location in time must be recovered from the clause they precede and, in general, their obvious function as adverbial clauses, the *ing*-constructions in (31) and (32) do not differ at all from those in (33). However, only in (33) does the *ing*-form qualify as a participle, while in the first two sets of examples it is analyzed as a gerund. The reasons standardly given for this classification are the following (e.g., Jespersen 1940: 407, Stump 1985: 11–13). The augmenting elements in (33) can take a finite clause but not a nonpredicative noun phrase as complement, and thus qualify as true subordinating conjunctions. Those in (31) and (32), on the other hand, can take a nonpredicative noun phrase as complement; hence they represent prepositions:

- (34) a. *after/on/*when his arrival at the station, ...*

The problem is that the augmenting elements in (32), too, may introduce finite clauses, i.e., may have the additional function of subordinating conjunctions. Only *on*, *in*, or *by* in (31) are prepositions proper in that they cannot take a finite clause as complement (cf. also Quirk et al. 1985: 660):

- (34) b. *after/when/*on he arrived at the station, he ...*

This leaves us with a problem with respect to the syntactic analysis of the *ing*-constructions: While those in (31) clearly qualify as adverbial gerund clauses (short: adverbial gerunds) and those in (33) as adverbial participles, it depends on which viewpoint one takes when deciding on the syntactic status of the constructions in (32). Arguing strictly syntactically, they must receive the same classification as those in (31), i.e., as adverbial gerunds. However, on approaching these constructions from a comparison of finite and nonfinite adverbial clauses, they have also been grouped with the augmented adverbial participles

in (33) (cf. Quirk et al. 1972: 734 and Bäcklund 1984 on conjunction-headed abbreviated clauses).

For the purposes of this paper, the distinction between adverbial gerunds and adverbial participles, relevant though it may be from a syntactic point of view, will be of no further concern as they exhibit parallel semantic and pragmatic behavior.

2.2.4. *Adverbial participle vs. nonrestrictive relative clause*

While adverbial gerunds can be distinguished from adverbial participles on syntactic grounds at least, this is almost entirely impossible for detached participial clauses immediately following a noun phrase, as in (35):

- (35) a. *The new airline hub, receiving flights initially from the twelve countries, will help cut mail delivery times.*
 b. *Jonathan Dimbleby, pacing no-man's-land between addressing the camera, strove valiantly to hustle them along.*
 c. *Mr Kinnock, speaking in Birmingham, ridiculed Mrs Thatcher.*
 d. *One wife, believing herself to be rational, wanted to know from the police whether it was possible that the blast had turned up the radio's volume.*

These clauses exhibit exactly the control properties of adverbial participles and in many cases offer similar interpretative options. They could just as well precede or follow the main clause without any effect on their semantics. To a certain extent, such participial clauses in postnominal position can therefore be viewed as counterparts of the participial constructions discussed in subsection 2.2.2. Whereas the latter neutralize the difference between verbal complements and nondetached adverbial participles, the former neutralize the difference between nonrestrictive (or: nondefining) postmodifying clauses and detached adverbial participles – with one exception: participial clauses involving auxiliary verbs or the verb *be* can never function as nonrestrictive relative clauses (Quirk et al. 1985: 1125):

- (36) a. *The children, having eaten their fill, were allowed to leave the table.*
 b. *The old man, being of sane mind, dictated and signed his will.*

In conclusion to section 2.2., Table 3 renders visual along which four (weighted) parameters such problematic constructions as have been discussed can be shown to differ from prototypical adverbial participles on purely formal and syntactic grounds. The first two parameters are valid for all adverbial participles, the latter two account for roughly 95 percent of the adverbial participles in the corpus. Neither (a) the construction as a whole nor (b) the *ing*-form itself assumes the syntactic function of a noun, i. e., neither of them serves as the

complement of a preposition or the argument of a tensed predicate; furthermore, prototypical adverbial participles are (c) detached from the main predication, and (d) placed at the margins of the complex sentence. Each of the related constructions in subsections 2.2.1.–4 fails on at least one of these four properties: (23a–c) fail primarily, (23b) fails exclusively on (a); the participial complements in (23d–e), (25) and (27) fail on (c); (31) and (32) fail on (b). The nonrestrictive relative clauses in (34) fail on none of the first three parameters; it is only on the strength of the “preferred position” parameter that they are distinguishable from prototypical adverbial participles. This distribution of properties is sketched in Table 3.

Table 3. Four syntactic parameters for the distinction between adverbial participles and other syntactic functions of the *ing*-form

	(a)	(b)	(c)	(d)
subject/object clause (23a)	–	+	–	+
subject clause, dislocated (23b)	–	+	+	+
participial complement (23d), (23e), (25), (27)	+	+	–	+
adverbial gerund (31), (32)	+	–	+	+
nonrestrictive relative clause (35)	+	+	+	–
<i>prototypical adverbial participle</i>	+	+	+	+

What makes the distinction of adverbial participles from participial complements and from adverbial gerunds so difficult is, on the one hand, that *ing*-clauses may still function as adverbial clauses even if they lose one of the properties (b) and (c). If they do lose both, *ing*-clauses also lose property (a), as in *I prefer singing to dancing* or *Singing in the rain is great fun*. On the other hand, these two types of constructions nicely illustrate the fluid borders between simple and complex sentences, which represent an additional complicating factor in their distinction from adverbial participles.

2.3. Syndesis

Free adjuncts and absolutes differ sharply from the point of view of syndesis, a traditional concept which is taken here as relating to the explicitness of clause

linkage via “the presence ... of a connective device between two clauses” (Lehmann 1988: 210): (i) free adjuncts may be introduced by (subordinating) adverbial conjunctions, whereas absolutes may not; (ii) free adjuncts exhibit only very rarely syndetic linking (5.5 percent of almost 1,400 constructions), whereas this is quite usual for absolutes (45 percent of 269 constructions). Following Stump (1985: 13), free adjuncts and absolutes syndetically linked to the matrix clause will henceforth be referred to as *augmented adjuncts* and *augmented absolutes* respectively.

Excluding adverbial gerunds from the discussion here, prototypical augmented adjuncts can be introduced by either subordinating conjunctions proper (e.g. *while*, *when*, *although*), as in (33), or prepositions that may additionally function, though in a restricted way,¹² as subordinating conjunctions (e.g. *after*, *before*, *since*), as in (32). For most circumstantial (or: adverbial) relations, augmentation of free adjuncts is optional. For some however, like “comparison” in (37 a), it is obligatory, while for others, especially “cause/reason”, it is generally precluded. Therefore, free adjuncts introduced by *since*, as in (37 b), always receive a temporal interpretation (Greenbaum 1973: 1–2):

- (37) a. “*Richthoven*,” *he replied finally, as if selecting from a considerable choice.*
 b. *Since refusing the offer, John hasn’t been to see us.* (Greenbaum 1973: 1)

Despite the optionality of augmentation, almost all augmented adjuncts in the corpus express a temporal relation (“anteriority”, “simultaneity”, “posteriority”), as in (38a–c) respectively, “contrast” (38 d) or especially “concession” (38 e):

- (38) a. *After dropping out of Yale University in 1931, he worked for radio station WEVD as an announcer.*
 b. *While speaking they had moved from the corridor into the hallway of the suite.*
 c. *He would hear the other side of the story before making any judgment.*
 d. *He may have been first while finishing third.*
 e. *Although tired, he finished his report the same night.*

It is noteworthy that these five circumstantial relations exhibit very different proportions of augmented and unaugmented adjuncts. Whereas almost a third of the free adjuncts expressing “contrast” or “concession” are augmented, augmented adjuncts make up for only 17 percent of those expressing “anteriority” or “posteriority”, and as little as 4.4 percent of those receiving a “simultaneity” interpretation. It will be demonstrated in section 4.3 how these differences fit in with the hypothesis that circumstantial relations can be arranged on a gradient according to their degree of “informativeness” or cognitive complexity, and that this gradient figures prominently in the process of interpreting free adjuncts and absolutes.¹³

While almost every circumstantial relation can be explicitly marked on free adjuncts via adverbial subordinators, this is generally impossible for absolutes in present-day English (in contrast to earlier periods when no such constraints existed; cf. Visser 1972: 1158, 1271–1277). In fact, the inventory of augmentors is extremely limited, as the examples in (39) show, and practically boils down to a single option for non-negated absolutes, namely *with*-augmentation as in (39 a):

- (39) a. *With John driving we won't have a lot of fun.*
 b. *Without the headmaster noticing, they removed all the tables from the classroom.*
 c. *We worry about Miss Masha a bit, what with her daddy being away and all.*
 d. *They left without a word, and he so sensitive.*
 e. *It was almost impossible to find a seat, and the train moving too.*

The options in (39c–e) are more than marginal. They are found in colloquial spoken language only: *what with*-absolutes often have a causal overtone, whereas *and*-augmented absolutes frequently receive a concessive or adversative interpretation. The latter type of absolutes is used productively only in Irish English (39 e), as a result of Celtic loan syntax (cf. Filppula 1991); in current British and American English it is restricted to absolutes with a non-verbal “head”, as in (39 d).

Augmentation in absolutes, therefore, essentially means *with*-augmentation. The exact syntactic status both of *with* in this function and the rest of this construction is not uncontroversial. There is more agreement on the first issue: almost all authors regard *with* as a preposition here, too. Berent (1975: 11), on the other hand, explicitly denies this since “this *with* ... can precede an absolute beginning with the expletive *there* ...” as in (40):

- (40) *With there being so many people in the room, we couldn't hear each other.*
 (Berent 1975: 11)

With regard to the material following *with*, opinions differ as to whether it should be analyzed as a single constituent (e.g., Jespersen 1940, McCawley 1983), as two constituents consisting of a noun phrase plus a predicative phrase (e.g., van Riemsdijk 1978), or as sometimes exhibiting the former, sometimes the latter syntactic structure depending on whether *with* has a possessional meaning or not (Sakakibara 1982). McCawley (1983: 271–272) gives convincing arguments for a single constituent analysis. This also solves the first problem: it makes *with* qualify as a preposition with a sentential complement, which indeed is what subordinate conjunctions are analyzed as by Jespersen ([1948]: 89) already, but also in more recent syntactic theories (cf., e.g., Emonds 1976: 172).

For the present account, a much more interesting question is whether the difference between augmented and unaugmented absolutes is simply one of

syndesis. It will be shown below that, indeed, it is not. *With* may not be capable of marking absolutes for a particular interpretation; nevertheless, augmented and unaugmented absolutes differ with respect to the interpretations they receive (subsection 4.2.2), and the referential semantics of their subjects (section 3.2). Concerning their position in the complex sentence, too, they differ. Compare the percentages for the position immediately preceding (“initial”) and following (“final”) the matrix clause in Table 4.

Table 4. Position of free adjuncts and absolutes

	Free adjuncts (n = 1412)	Unaugmented absolutes (n = 147)	Augmented absolutes (n = 122)	Total (n = 1681)
initial	32.2%	8.2%	21.3%	29.3%
medial	6.9%	2.7%	3.3%	6.3%
final	60.9%	89.1%	75.4%	64.4%

Taken together, the differences shown in Table 4 bear witness to the fact that even the weakest, semantically most empty form of syndesis interacts with the syntactic, semantic, and pragmatic properties of the construction it operates on. It remains to be seen whether this interaction amounts to a conditioning, and what the direction of this conditioning is.

3. Subject reference

In his study of types of syntactic chaining in the world's languages, Stassen (1985: 85–88) formulates the following two implicational universals, confirmed by König–van der Auwera (1990: 339–341), concerning the availability of what he calls *conditional deranking* (yielding subject-controlled free adjuncts), *absolute deranking* (yielding absolutes) and *conditional deranking under identity with a non-subject*:

- (41) a. ... there are no languages in which deranking under non-identity of subjects is possible while at the same time deranking under identity of subjects is forbidden. [...] It is only to be expected that the possibility of absolute (i.e., non-identity) deranking will necessarily imply the ability to achieve deranking under identity of subjects.
- b. ..., no language permits this type of non-subject identity on conditional deranking while at the same time forbidding conditional deranking under subject-identity. On the other hand, there are numer-

ous languages which permit conditional deranking only if the identity of the identity relation holds between two subjects.

The prediction following from Stassen's universals, viz. that conditional deranking will be the most frequent of these three types, is clearly borne out in English. Subject-controlled (so-called *related*) free adjuncts are indeed used much more frequently than both absolutes (5:1 ratio) and free adjuncts not controlled by the matrix subject (9:1 ratio). It is the referential nature of the subject of these two clearly dispreferred classes of constructions which will be examined in this section. Among other things, it will be shown why in present-day English subject reference does not represent a valid criterion for drawing a distinction between free adjuncts and absolutes.

3.1. Free adjuncts

3.1.1. Range of controllers

One can distinguish three groups of unrelated free adjuncts: (i) those lacking a controller other than the "dummy *it*" (42); (ii) those with an identifiable, but nevertheless "covert" controller, i. e., an indefinite pronoun (43 a), the speaker/author *I/we* (43 b) or the hearer/reader *you* (43 c); (iii) free adjuncts with a controller recoverable from the matrix clause or the cotext (44).

(42) *Being Sunday, all banks were closed.*

(43) a. *Even allowing for fast driving, twenty minutes was optimistic.*

b. *Frankly speaking, the conference hotel was the pits.*

c. *Practise the following words ..., not forgetting the few rules given above, and taking care not to impose English rhythm on the words - ... (J. Breen, Japanese Simplified, London: Hugo, 1987, p. 11)*

Instances of "zero-control" as in (42), all with the present participle of *to be* taking a time location as complement, are extremely rare and come close to fixed, slightly old-fashioned expressions. Much more frequent, approximately one in four unrelated adjuncts, are those belonging to the second group, especially so-called *speech act qualifiers* as in (43 b). The great majority of unrelated free adjuncts, however, fall into the third group, which in turn can be divided into four subgroups. Controller function may be fulfilled by the referent(s): (i) of a nonsubject noun phrase in the matrix clause (44a-d); (ii) of a possessive pronoun (44e-f); (iii) of elements, especially pragmatically salient individuals, in the preceding cotext (44g); or (iv) the matrix predication or, more frequently, the matrix proposition as a whole (44h-i):¹⁴

(44) a. *... one slip in the strict diet regime can precipitate them into eating vast quantities of food, regarding 'all to be lost' ...*

- b. *Cutting off her protest, there was a click as the caller hung up.*
- c. *... the Yard ... told them to apply to me, knowing the place and being on the spot.* (Visser 1972: 1142)
- d. *..., the immediate impact of the reduced auto exports will be positive, enabling the United States to report a continued decline in the size of its trade deficit ...*
- e. *Arrived there, his first act was to kneel down.* (Friederich 1978: 242)
- f. *Well now, being in Wisconsin over a period of some weeks, what's your impression of popular feelings about McCarthy?*
- g. *Walking down the boardwalk, a tall building came into view.* (Quirk et al. 1985: 1121)
- h. *... some developing countries have sent more money out than is coming in, leaving them short of funds for investments and to pay for critically needed imports.*
- i. *Unknown to Mr Mori, the other big trading houses were also putting together a consortium ...*

Of the above types of controllers, the referent(s) of nonsubject NPs in the matrix clause clearly account for the largest number of unrelated free adjuncts. Moreover, such controller NPs tend to serve the function of direct object, as in (44 a), significantly more frequently than those of subject complement or prepositional complement, as in (44 b–c). In general, English free adjuncts are controlled by a matrix NP in more than 95 percent of all instances. The control facts of English, progressing from general to specific, can be represented as follows:

- (45) a. “matrix” control > “non-matrix” control
 b. NP control > non-NP control
 c. matrix NP control > nonmatrix NP control
 d. for matrix NP control:
 subject control > object control > complement control

(45 a–d) can safely be assumed to reflect universal tendencies, both in terms of frequency (from left to right) and in terms of Stassen-type implicational hierarchies (from right to left) as formulated in (46):¹⁵

- (46) a. The possibility of control by a constituent outside the matrix clause (more exactly: outside the complex sentence) necessarily implies the possibility of control by a matrix constituent.
 b. The possibility of control by a non-nominal constituent necessarily implies the possibility of control by a nominal constituent.

- c. The possibility of control by a non-nominal matrix constituent or a constituent outside the matrix clause necessarily implies the possibility of control by a nominal matrix constituent.
- d. For matrix NPs, the possibility of control by a noun phrase serving a grammatical function assuming a low position on a configurational hierarchy necessarily implies the possibility of control by a noun phrase serving functions higher up on this hierarchy.

In other words, no language will allow the possibilities to the right of the “>” without allowing the possibilities to the left of it, but not vice versa. From (45) and (46) it is just a small step to hypothesizing a “Controller Accessibility Hierarchy” which may well be valid for all languages allowing implicit-subject verbs. It has been formulated for syntactic constituents only, as it is unclear where exactly in the bottom part of this hierarchy to place controllers as, e.g., in (43) or (44 h–i). Following the well-known pattern of the Keenan and Comrie hierarchy (1977: 66), “>” here reads “is more accessible than”:

- (47) subject > direct object > other nominal matrix constituent > non-nominal matrix constituent > “non-matrix” constituent

It must be stressed that this accessibility hierarchy cannot be made the basis for predictions which controller will be chosen for any specific free adjunct. In other words, it is only of very limited significance for the individual process of identifying the controller. For this process, a bundle of other (often interacting) factors is more important. These include first and foremost semantic-pragmatic factors (nonviolation of selectional restrictions, world knowledge, correspondence of thematic roles) but also syntactic factors like the position of the free adjunct or the presence of reflexive or possessive pronouns.

3.1.2. *Control-conditioning factors*

The single most important condition any potential controller of a free adjunct must fulfil is the nonviolation of selectional restrictions, i. e., the inherent semantic properties of the controller must necessarily be compatible with those of the (head of the) predication of the free adjunct. This is why, contrary to what Beukema (1985: 196) argues, the positions that a noun phrase assumes on a hierarchy of grammatical functions (subject > object > P Object) or a pragmatic hierarchy (human agents > humans > animals > things > abstractions > expletive elements) are virtually irrelevant.¹⁶ Where the free adjunct demands, for example, an animate controller but the referent of the matrix subject is either inanimate or abstract (cf. several of the examples in [44]), or only part of the required controller, as in (48), subject control is immediately precluded and a semantically appropriate controller selected:

- (48) *Nonchalantly smoking a cigarette, his hands automatically found the chords and beat out the rhythm.* (Friederich 1978: 242)

Moreover, as the language user will always try to make this (unidirectional) matching process one that is successful, the set of potential controllers is not restricted to participants referred to by material in the matrix clause or the complex sentence. Participants introduced in the preceding context may just as readily be selected, which is yet another proof of the fact that control in free adjuncts is not just an intrasentential phenomenon:

- (49) *John fetched some newspapers from the table and settled down in his favorite armchair. Reading the evening paper, the children barged in without a sound of warning.*

Knowing about selectional restrictions forms part of our general world knowledge, which must be mentioned as a separate semantic-pragmatic factor capable of conditioning control. Thus it is our knowledge of the role distribution in standard interactive scenarios which alone is responsible for assigning subject control to (50 a), at least as one possibility, but not to (50 b):

- (50) a. *Having paid our bill, Dr Jones brought our hats.*
 b. *Having paid our bill, the waiter brought our hats.* (Visser 1972: 1141)

Thematic relations may also play a role in determining the controller of a given free adjunct. Where a matrix clause offers more than one candidate for controllership from the point of view of selectional restrictions, the one may be selected that exhibits the highest degree of correspondence with the thematic role required by the inflectional head morphology of the adjunct. In (51), for example, the adjunct clearly demands a patient as controller; consequently, neither of the experiencer NPs in (51 a) and (51 b) is eligible as its implicit subject:

- (51) a. *Seen so close, he thought of her as a Greek goddess.*
 b. *Seen so close, he struck her as too old.*

“Thematic correspondence”, however, can hardly be a major conditioning factor. While it seems to work for passive adjunct propositions, it evidently makes the wrong predictions with regard to the controller of active adjuncts when the matrix clause is passive, as in (52 b):

- (52) a. *Lying idly in the sun, John watched Mary.*
 b. *Lying idly in the sun, Mary was watched by John.*

Mohanan (1983: 650) adduces this sentence pair in support of his general hypothesis that “control in participial clauses is not conditioned by thematic roles

or pragmatics, but by grammatical functions”, which indeed amounts to the claim that the empty subject position in free adjuncts is “obligatorily controlled by the matrix subject.” The previous section should have provided sufficient proof for immediately dismissing this claim as not being supported by the facts. On the other hand, Mohanan is certainly right in stating that thematic roles cannot represent the conditioning factor in selecting the controller in (52 b). However, the conclusion he draws from this does not reveal the whole story. First of all, John and Mary are potential controllers only because both meet the condition “nonviolation of selectional restrictions”. But even then it can be shown that selecting *Mary* as controller in (52 b) does not follow from its subject function. If this were true, changing the position of the free adjunct should have no effect on the choice of the controller, but it has:

(52) b'. *Mary was watched by John, lying idly in the sun.*

With the participial clause in final position, it is *John* who is more likely to be the one lying in the sun. The difference in controller assignment between (52 b) and (52 b') suggests that the position of free adjuncts, more exactly the relative distance between the empty subject slot and the candidates for controllership, must also be reckoned with as a relevant factor in control. This has often been overlooked, or even downright been denied (Beukema 1985: 193). The conception of relative distance underlying the “proximity principle” at work here can be sketched as follows:

Within the S-node directly dominating the S-node of the free adjunct, i.e., the matrix clause, that candidate for controllership is the nearest one which is referred to by the NP separated by the smallest number (ideally zero) of nodes from the free adjunct. (Kortmann 1991 a: 74; cf. also 62–64, 75–76.)

The analysis of (52 a–b') therefore shows that control in free adjuncts cannot be reduced to grammatical function. Incidentally, it also undermines a proposal by Haspelmath (this volume) who, contemplating a radical pragmaticist position, suggests the following as a possible alternative interpretation of the sentence pair (52 a–b): “the passive clause in [52 b] gives greater pragmatic salience to the patient participant *Mary*.” Consequently, as his general prediction for free adjunct-like converbs is that “the implicit subject is controlled by the most salient participant”, *Mary* serves as controller in (52 b). Although it is not clear what exactly is meant by pragmatic salience (givenness, thematicity?), surely the pragmatic salience of *Mary* in (52 b) and (52 b') is the same, and yet it is *John* who controls the participial clause in the latter. The general lesson to be learnt from this is that any kind of reductionist approach to control in converbs will fail in accounting for all control possibilities. And yet one suspects that there must be

a general processing principle which explains why subject control universally is the default case for implicit-subject converbs. This is what makes the radical pragmaticist stance so intriguing, after all.¹⁷

Finally, two more syntactic factors may enter into the process of identifying the controller. Possessive pronouns, whether in the matrix clause (44 e–f) or the adjunct itself, may facilitate this process by introducing further participants on the scene and thus more potential controllers. Reflexive pronouns in the free adjunct generally determine the choice of the controller, as the following two examples show:

- (53) a. *Keeping his/her/their sorrows to himself, we didn't know how to help.*
 b. *Keeping his sorrows to himself/herself/themselves, we didn't know how to help.*

3.2. Absolutes

Typically, only free adjuncts are studied with respect to the referential relation holding between their (implicit) subject and matrix constituents. Doing the same for absolutes, however, also reveals interesting constraints on the nature of their subject, which can, moreover, be shown to correlate with the presence/absence of syndesis. In the following, I propose distinguishing four groups of subjects which exhibit an increasing degree of coreference with matrix constituents: subjects exhibiting no coreference, at all (54), constituent coreference (55), part-whole coreference (56), and full coreference (57).¹⁸

The first group of subjects generally includes dummy subjects, as in (40) above and (54 b), as well as the subject in stereotyped phrases like *weather permitting, all being well*, etc. What is striking, however, is that the proportion of noncoreferential subjects in *with*-augmented absolutes is more than three times as high (52 percent) as the one in unaugmented absolutes (15 percent):

- (54) a. *Protocol having been satisfied, ... the large party proceeded to squeeze the small party out of all proportion to his popular vote ...*
 b. *He could not build anything, ..., without it being obvious that he had done it, ...* (Bäcklund 1984: 38)

For the second type of subjects in absolutes, there exists a coreference relation between a nominal part of the subject NP and some matrix NP (55 a) or, vice versa, between the subject NP and the nominal part of some matrix NP (55 b). Following Berent (1975: 15), instances as in (55 c), where one of the constituents standing in a relation of (full or partial) coreference is only felt to be implied, also belong here. Again, subjects of this kind are proportionally more frequently found in augmented absolutes:

- (55) a. *He was seldom without a feminine escort on his travels, the composition of the escort changing frequently.*
 b. *... a shaft of sunlight slanted across the judge's bench and the sentence which followed – the sunlight still remaining – had been a lenient three years ...*
 c. *The silesian was still droning on, the audience [of the Silesian] still standing aimlessly round him.*

The largest of the four groups of subject referents presented here is the one where the subject of the absolute stands in a part-whole relationship to the referent of some matrix NP. In all of the examples in (56) this type of partial coreference holds between the two subjects. Not infrequently, it is overtly marked by possessive pronouns or noun phrases “in the genitive”, as in (56 a–b), or by expressions like *each*, *some*, *the former/latter*, etc., for part-whole relations involving sets (56 c):

- (56) a. *My head bursting with stories and schemes, I stumbled in next door, ...*
 b. *“That’s better!”, he said, his spirits rising a little.*
 c. *Behind him the fellows of porterhouse sat rigid like embalmed figures ..., each absorbed in calculating his own complicity in a scandal ...*

Subjects as in (56) represent the by far most frequent type of subjects in unaugmented absolutes (more than 70 percent), while they occur only in about a third of the augmented absolutes.

As one would have expected, subjects exhibiting full coreference with some matrix NP are least frequent. Nevertheless, as can be seen from (57 b–c), the subject of absolutes may even be coreferential with the matrix subject (!):

- (57) a. *She picked up a wine jug ... and strode across to the foot of the dune, the jug on her head.*
 b. *In Bengali the two prototypical constructions are ..., the two being generally equivalent semantically but ...*
 c. *Their patron, St Anthony, was the Egyptian hermit, he having been held to foster the growth of herbs in the desert.* (Scheurweghs 1969: 164)

Instances like (57 c), with a personal pronoun as one of the coreferential noun phrases, are practically obsolete in present-day English, which demands the use of a free adjunct here. This is confirmed by the fact that the corpus provides not a single example of this kind.

The most important result which an analysis of the referential nature of the subjects of English absolutes yields clearly is the sharp contrast between augmented and unaugmented absolutes. This contrast is documented in Table 5.

Almost two-thirds (64 percent) of the augmented absolutes in the corpus have subjects exhibiting either no coreference at all, or the weakest kind of (because

Table 5. The degree of coreference displayed by the subjects of augmented and unaugmented absolutes

Unaugmented absolutes (n = 147)		Augmented absolutes (n = 122)
6.0%	full coreference	2.5%
71.5%	part-whole coreference	33.5%
7.5%	constituent coreference	12.0%
15.0%	no coreference	52.0%

often merely implied) coreference with a nominal matrix constituent. This contrasts sharply with the corresponding figure (22.5 percent) for unaugmented absolutes. From the opposite perspective, the contrast is almost as pronounced: compared with the corresponding proportions in augmented absolutes, more than twice as many subjects of unaugmented absolutes are of the part-whole type, and almost three times as many fully coreferential with a matrix NP. How are we to interpret these striking differences? For absolutes, there seems to exist a balance between their semantic integration (via coreference relations) and their syntactic integration (via syndesis) into the matrix clause. Under a weak hypothesis, this balance could simply be described in the way that less in the one tends to be compensated by more in the other, and vice versa. I am, however, inclined to favour the stronger hypothesis that it is essentially the degree of semantic integration which provides the key to a proper understanding of this equilibrium: a low degree of coreference (or: participant sharing) calls out for syndetically linking the absolute to the matrix clause, whereas a high degree of semantic integration allows for a lack of syndesis. Observing this equilibrium undoubtedly increases the ease of processing and thus the acceptability of absolutes. Where, on the other hand, absolutes exhibit a low degree of both semantic and syntactic integration, they may cause processing difficulties and lose in acceptability. This would also explain why unaugmented absolutes with subjects of the "no coreference" type account for as little as eight percent of all absolutes in the corpus. Berent (1975: 20) was the first to point out that the acceptability of absolutes is conditioned by (i) the degree of their syntactic or semantic connection with the matrix clause as well as (ii) a clear marking of their subordinate status (via *with*-augmentation). He failed to notice, however, that (i) and (ii), i.e., the semantic connection (via full or partial coreference of the subject of the absolute with matrix constituents) and *with*-augmentation, are not independent of each other, more exactly that the equilibrium postulated above is a crucial factor underlying the production and processing of English absolutes.

Further conclusions to be drawn from the analysis presented in this section concern the distinction between free adjuncts and absolutes, and their use as competing construction types in the domain of (overwhelmingly) nonfinite adverbial subordination. First of all, the fact that the subject of absolutes may be fully coreferential with the matrix subject, even if only marginally, shows that the difference between free adjuncts and absolutes cannot be defined along the lines of referential subject identity or nonidentity, as proposed by Visser (1972: 1132, 1149, 1259), but solely on the basis of the absence or presence of an overt subject NP in the subordinate construction. This is not to deny, of course, that the prototypical free adjunct (91.5 percent) is controlled by the matrix subject, and that the prototypical English absolute (99 percent) has a subject which is not fully coreferential with the matrix subject.¹⁹ This division of labour between free adjuncts and absolutes in present-day English is not astonishing. It can be seen as the result of a historical development which seems only natural from the point of communicational efficiency and which, in addition, has been reinforced by normative grammars. Notice that in earlier periods of English one can even find examples as in (58), where the subject of the absolute controls the empty subject position of the matrix clause (cf., e.g., Visser 1972: 1160–1161):

- (58) a. *His hat being blown off his head, chanced to fall into the court.*
 b. *Her son seeing me, came forward.*

Finally, Berent (1973: 150) has claimed that absolutes “represent a highly developed form” of a widespread construction in Proto-Indo-European, viz. the so-called *partitive apposition*. In view of this claim, it is noteworthy that “part-whole” absolutes not only account for more than half (54 percent) of the absolutes analyzed but also often resemble appositive or coordinate clauses more than adverbial clauses (cf. section 4.2). If Berent is right, absolutes in present-day English, especially those of the unaugmented type (71.5 percent), to some extent still reflect the origins of this Indo-European construction. One would expect similar results for other Indo-European languages, too. As a matter of fact, this tendency is even more pronounced in Modern German, which allows only (!) unaugmented absolutes. For present-participial absolutes, Bungarten (1976: 142) has found that their subject *must* stand in a part-whole relation to the matrix subject.

4. Interpretation

The standard assumption in the literature on free adjuncts and absolutes, and same-subject and different-subject converbs in general, is that the two do not differ concerning the range and nature of the interpretations they may receive.

The central thesis of this section is that this is not true. Indeed, it will be shown that there are not only striking differences between free adjuncts and absolutes, but also noticeable differences between augmented and unaugmented absolutes.

The main task of this section is to identify the major tendencies resulting from Table 6, which gives the details concerning the distribution of different adverbial (or, more generally, interclausal semantic) relations among free adjuncts, unaugmented and augmented absolutes. This will be done in three steps: by a look at the preferred interpretations of these constructions, in general (4.1), followed by a discussion of the differences in the interpretative behavior of free adjuncts and absolutes (4.2.1), and augmented and unaugmented absolutes (4.2.2). In a further step, we shall broaden the perspective by proposing a classification of interclausal semantic relations in terms of "informativeness" and making it the basis for generalizations concerning the nature of the differences in interpretation identifiable for the three types of construction (4.3). More exactly, it will be suggested that these are not random differences. They reflect general functional and pragmatic principles, and the predictions following from this may well have universal validity.

The figures in Table 6 have been arrived at on the basis of an analysis of all free adjuncts and absolutes in the corpus, i.e., independently of the nature of their head. It should be recalled, however, that participial clauses account for 93 percent, and present participial clauses for 89 percent of the data (cf. Table 2). In ascribing some interpretation to a free adjunct or absolute, it was always the strongest one justified by the context that was selected.²⁰

A single look at Table 6 confirms that English free adjuncts and absolutes fall into Nedjalkov's category of nonspecialized, contextual converbs. However, it can also be seen how unevenly distributed the different interclausal relations are, both viewed against their total distribution and against their distribution among the three construction types.

4.1. Preferred interpretations

This section seeks answers to two questions: Which domains of interpropositional relations are preferably expressed by free adjuncts and absolutes? And to what extent could the nonfinite constructions be glossed by means of finite adverbial clauses introduced by a conjunction? In other words, is there some kind of division of tasks between finite and nonfinite subordinate clauses concerning the signalling of interclausal semantic relations? Table 7 provides part of the answers to these two questions.

The eight interclausal semantic relations in Table 7 account for roughly 75 percent of the data. They can be subdivided into the temporal group, the

Table 6. Distribution of interclausal semantic relations

	Free adjuncts (n = 1412)	Unaugmented absolutes (n = 147)	Augmented absolutes (n = 122)	Total (n = 1681)
Simultaneity (“while”, “when”)	16.1%	7.5%	4.3%	14.4%
Anteriority (“after”)	10%	—	2.5%	8.6%
Posteriority (“and then”, “before”)	4.7%	—	—	3.9%
?Simultaneity/Anteriority (“when”/“after”)	0.6%	—	—	0.5%
?Simultaneity/Posteriority (“when”/“and then”)	2.8%	—	—	2.3%
Condition (“if”)	4.0%	2.0%	0.8%	3.6%
Conc. Condition (“even if”)	0.4%	—	0.8%	0.4%
Cause (“because”)	11.8%	15.7%	22.1%	12.9%
Concession (“although”)	3.0%	1.4%	3.3%	2.9%
Contrast (“whereas”)	1.4%	2.0%	4.9%	1.7%
Instrument (“by”)	3.3%	—	—	2.7%
Manner (?)	1.4%	7.5%	1.6%	2.0%
Purpose (“in order to”)	2.8%	—	—	2.3%
Result (“so that”)	8.4%	2.0%	2.5%	7.4%
Addition/According circumstance (?)	12.2%	38.1%	26.2%	15.4%
Exemplification/Specification (“e.g”, “i.e.”)	11.5%	17.7%	31.2%	13.5%
other relations (“as if”, “instead of”, “rather than”)	1.3%	1.4%	—	1.3%
non-restrictive/sentential relative clause	3.1%	4.8%	0.8%	3.1%
More than one relation possible	1.4%	—	—	1.2%

Table 7. Most frequent interclausal relations (>5%)

Addition/Accompanying Circumstance	15.4%
Simultaneity	14.4%
Exemplification/Specification	13.5%
Cause	12.9%
Anteriority	8.6%
Result	7.4%

causal group, and a third group which cannot be glossed by any finite adverbial clause except perhaps a *while*-clause, i.e., “addition/accompanying circumstance”, as in (59), and “exemplification/specification”, as in (60):

- (59) a. *Dodo joined him, two laden bellboys following like acolytes behind a goddess.*
 b. *As Dunn framed each question, Charlie answered it in his own mind; smiling, frowning, and even prepared to shed a tear behind his hands.*
- (60) a. *... eventually you have to sort of sort-out things yourself, finding examples and underlining things and then working out what's what.*
 b. *... he paid the closest attention to everything Lenny said, nodding, congratulating, making all the right expressions for him.*

For the nonfinite constructions in (59) it is not possible to give another specification than the vague “addition” or “accompanying circumstance”; they introduce a state or event which, from the addresser's point of view, forms a mental unit with the state or event in the matrix clause. The only condition on the propositions involved is the unity of time and space (cf. Kortmann 1991 a: 168–170), i.e., they cannot be viewed as narrative (coordinative) converbs in Nedjalkov's sense. The adjuncts in (60) provide additional information, too, but the connection between the subordinate and the main clause is stronger in that the former

... does not introduce a new element into the picture but rather provides a further characterization of one that is already there, restating it, clarifying it, refining it, or adding a descriptive attribute or comment. (Halliday 1985: 203)

Hence, Halliday treats “exemplification” and “specification” as special instances of what he calls “elaboration” (1985: 203). The nearest glosses adjuncts like those in (60) may receive are postposed clauses introduced by *i.e.*, *e.g.*, *in that*, *more exactly*, etc. (cf. Kortmann 1991 a: 166–168), while those in (59) can often only be rendered by means of juxtaposed or *and*-coordinated finite clauses. The borderlines between the interclausal relations in (59) and (60), which account for almost 30 percent of the analyzed free adjuncts and absolutes, may not

always be easy to draw, but they all clearly differ from the set of generally acknowledged standard adverbial relations.

On the basis of the most frequent individual interpretations in Table 7, we can generalize and state the following concerning preferred interpropositional domains of free adjuncts and absolutes. About 90 percent of these constructions express an interclausal relation belonging to one of the three groups identified above. One third express a temporal relation, not surprisingly with "simultaneity" as the most frequent, "anteriority" as the next frequent, and "posteriority" clearly as the least frequent relation. About a quarter signal relations involving notions of cause, i. e., "cause/reason", "instrument", "result" and "purpose" (cf. Mann–Thompson 1987: 57). These proportions (together almost 60 percent) reflect the fact that the interpretation of discourse crucially involves establishing a temporal structure as well as causal relationships. While similar proportions will also be found for finite adverbial clauses signalling relations belonging to these two groups, this is different for the last group, constituted by the interpretations illustrated in (59) and (60). Following Halliday (1985: 204–206), adjuncts and absolutes that can best be glossed by nonrestrictive or sentential relative clauses also belong here. The third part of the nonfinite or verbless constructions in the corpus fall into this group of supplementive relations.²¹ To a certain extent, therefore, one can speak of a division of tasks between finite adverbial clauses and the constructions investigated here: the latter go beyond a strictly adverbial or circumstantial function, offering interpretative options which are excluded by the former. As the figures show, these options are by no means marginal. This confirms Nedjalkov's observation (this volume) that "... constructions with converbs and conjunctions are by no means interchangeable in languages that have both converbs and conjunctions." At the same time it reveals the major weakness of Nedjalkov's term *conjunctive verb* (cf. section 1.2) from a language-specific point of view: Almost 40 percent of the English converbs fulfil a function (e. g., accompanying circumstance, instrument, manner) for which the English language does not provide what is traditionally defined as a subordinating conjunction.²² This tendency, it should be noted, is much more pronounced for absolutes (68.6 percent for unaugmented, 59.8 percent for augmented absolutes) than it is for free adjuncts (33.4 percent), and more so in narrative texts than in other types of discourse.

To a certain extent the observations and conclusions in this section are biased by the composition of the text material. Thus, the ranking in Table 7 is identical with the distribution of interclausal relations as found in narrative. The reason is that although narrative texts add up to only one third of the analyzed material, they provide two thirds of the free adjuncts and absolutes in the corpus. However, other types of discourse (newspaper articles, scientific writing, spoken lan-

guage) exhibit very different preference rankings (cf. Kortmann 1991 a: 141). For a complete picture, one should keep in mind the following tendencies: (i) by and large, the top four relations in Table 6 are also most highly ranked in newspaper articles and in spoken language; (ii) in all non-narrative text types “exemplification/specification” and “cause” play a much more prominent role, however, than “simultaneity” and “addition/accompanying circumstance”. This tendency is particularly pervasive in scientific texts and spoken language, where they assume the two top positions, with a big gap following. The general lesson to be learnt from this is that statements on domains of interpropositional relations in which converbs are typically put to use cannot be viewed independently from the predilections that different types of discourse exhibit with regard to such domains (cf. Thompson 1983).

4.2. Differences between construction types

4.2.1. *Free adjuncts versus absolutes*

Free adjuncts may not only receive a wider range of interpretations than absolutes, their interpretations are also much more evenly distributed. Furthermore, they differ sharply from absolutes with respect to which interclausal relations they most frequently express. Consider Table 8.1 for interclausal relations accounting for more than five percent of free adjuncts and absolutes, respectively.

Table 8.1. Free adjuncts versus absolutes (I)

	Free adjuncts (n = 1412)		Absolutes (n = 269)
Simultaneity	16.1%	Addition/Accompanying circumstance	32.7%
Addition/Accompanying circumstance	12.2%	Exemplification/ Specification	23.1%
Cause	11.8%	Cause	18.6%
Exemplification/Specification	11.5%	Simultaneity	5.6%
Anteriority	10.6%		
Result	8.4%		
Posteriority	7.4%		

The differences for the top four interclausal relations in Table 8.1 are striking, in terms of percentages even more so than in terms of ranking. While more than half of the absolutes express “addition/accompanying circumstance” or “exemplification/specification”, this is true for only a quarter of the free adjuncts. This illustrates the tendency we found above: to a much higher degree than free adjuncts, absolutes tend to receive interpretations which cannot be

expressed by a finite clause introduced by an adverbial conjunction. Just as striking is the high proportion of temporal interpretations among free adjuncts (34 percent), which is five times as high as the corresponding one for absolutes. Table 8.2 highlights the contrasts between the two types of construction by comparing the respective proportions for the three groups of interclausal relations representing the preferred semantic domain of free adjuncts and absolutes.

Table 8.2. Free adjuncts versus absolutes (II)

	Free adjuncts (n = 1412)		Absolutes (n = 269)
TIME	34.1%	SUPPLEMENTIVE	58.8%
SUPPLEMENTIVE	26.8%	CAUSE	20.8%
CAUSE	26.3%	TIME	6.7%

The most important restriction on the interpretation of absolutes we find in the temporal domain. It is close to impossible to employ an absolute construction for the purposes of “consecutive clause chaining” (Stassen 1985: 70), i.e., for the coding of successive events or states in main and subordinate clause. Past and perfect participial absolutes may express “anteriority”, but they do so only marginally. This contrasts sharply with free adjuncts, especially those with a present participial head, which, preferably in narrative discourse, are free to express both “anteriority” (61) and “posteriority” (62). In the latter function they resemble Nedjalkov’s coordinative converbs:

- (61) a. *Lifting the telephone, she asked for room 1410.*
 b. *Leaping out of a dark opening at the right, it ran towards him.*
 c. *Leaving home at six, he arrived in the hospital at eight.*
 d. *Ricoh is used to cooperative strategies, selling some products to European companies for a full decade.*
- (62) a. *The Negro’s own left first snapped upward, landing with a hard, sharp crack at the side of his attacker’s face.*
 b. *Miss Tyrell ... quitted the room, coming back again from half-way up the stairs to answer a knock at the door.* (Poutsma 1926: 518)
 c. *I’m going to Burgos ..., coming back on the twenty-ninth.*

As these two sets of examples demonstrate, the English converb is fully capable of denoting time intervals preceding or following the one at which the matrix proposition is true. For those cases where this is not signalled by past or future time adverbials in the adjunct, as in (61 c–d) and (62 c), it is possible to identify a set of conditions under which this is possible. The most important of these

are the following (cf. Kortmann 1991 a: 155): (i) telic, especially achievement, predicate in the adjunct; (ii) indication of a path or itinerary in the complex sentence; (iii) iconic word order. Different from “anterior” adjuncts as in (61), perfect participial adjuncts are free both to have an atelic predicate and to assume a position relative to the matrix clause which does not reflect the succession of events (cf. Kortmann 1991 a: 144–150). In the latter case, however, they are more likely to receive a nontemporal, mostly causal, interpretation compared with an initial position. Thus, although no strict iconicity constraints exist for these constructions, we can nevertheless observe a reinforcing effect of an iconic word order on their interpretation. Furthermore, perfect participial adjuncts can be viewed as competing constructions of “anterior” adjuncts with a present participial head only where a time adverbial forms part of the adjunct, as in (61 c) or (61 d). Otherwise, *having* v-*ed* constructions cannot express “immediate succession” (witness [63 a]), which is for the most part what the present participial constructions do. The time lapse separating the events in the adjunct and the matrix clause is perceived as much too large. This is crucially due to the fact that they frequently serve as back-referencing devices; in this function, they are often supported by demonstratives or an anaphoric expression like *so* in (63 b–c). As a result, many of these *having*-constructions have what Jespersen (1931: 183) calls a “retarding effect”:

- (63) a. *Having lifted the telephone, she asked for room 1410.*
 b. *Mervyn gave a good hard sniff at the parcel. And having done so, he reeled where he stood once more.*
 c. *He punched it through with his will. Having done so, he flew next morning to Munich, ...*

In general, our findings concerning the expression of nonsimultaneous temporal relations show that English perfectly conforms to the generalizations by König–van der Auwera (1990: 341):

It is, ..., invariably the option “anterior consecutive chaining” that is available in the languages of Europe. There do not seem to be any cases where the gerundial or participial construction itself denotes a posterior event independently of its position in the complex sentence.

However, they also show that English (like several other European SVO-languages) massively runs counter to the following two universal tendencies formulated by Stassen (1985: 90, 93):

- (64) a. If SVO-languages or VSO-languages derank their C-chains, they will derank posterior predicates.

- b. Languages which permit only conditional deranking of C-chains have posterior deranking and typically prefer SVO word order.

4.2.2. *Augmented versus unaugmented absolutes*

The difference in the interpretative behavior of *with*-augmented and unaugmented absolutes is one of degree. Compared with free adjuncts, both underlie the same interpretative restrictions; also, the proportions of the three groups of preferred interpretations are almost identical. Table 9, however, shows where the differences lie.

Table 9. Augmented versus unaugmented absolutes (>5%)

	Augmented (n = 122)		Unaugmented (n = 147)
Exemplification/Specification	31.1%	Addition/Accompanying circumstances	38.1%
Addition/Accompanying circumstances	26.2%	Exemplification/ Specification	17.7%
Cause	22.1%	Cause	15.7%
		Simultaneity	7.5%
		Manner	7.5%

Considering those interpretations which account for more than five percent of all absolutes, one finds first of all that the range of relevant interclausal relations is more restricted for augmented absolutes. Secondly, there is a shift of preference in the domain of supplementary relations, such that augmented absolutes much more frequently receive the stronger ("elaboration") interpretation, and considerably less often an "addition/accompanying circumstance" reading. Thirdly, the share of causal interpretations is significantly higher for the absolutes syndetically linked to the matrix clause. This latter tendency ties in with the fact that absolutes introduced by *what with* almost always express causality.

The picture, then, which emerges is that the two types of absolutes contrast with respect to the quality of their preferred interpretations. Only about a quarter of the augmented absolutes receive the weakest possible interpretation, whereas more than half of these constructions express an interclausal relation which is more specific than this. *With*-syndesis, we conclude, may not be able to mark absolutes for a specific interpretation, but it has a noticeable effect on the nature of their interpretation. This effect makes itself felt as a less drastic divergence from the interpretative behavior of free adjuncts, and thus confirms predictions following from general functional and pragmatic principles to be sketched in the next section.

4.3. Informativeness and iconicity

The interpretative differences identified in section 4.2 follow a specific tendency. This tendency can be captured in terms of the degrees of informativeness inherent in the interclausal relations expressed by free adjuncts, augmented and un-augmented absolutes respectively.

In Kortmann 1991 a, it has been suggested that one may postulate a gradient of “informativeness” (involving such notions as specificity and cognitive complexity; cf., e.g., Levinson 1987 a) on which interclausal relations can be arranged according to, primarily, the degree of world knowledge or (co-/contextually substantiated) evidence that is required in order for a free adjunct or absolute to be given the relevant interpretation. By acknowledging kinships and partial orders within the domain of semantic interclausal relations, such a gradient allows predictions concerning, for example, groups of relations which will recurrently form search domains for the interpretations of individual free adjuncts/absolutes, and along which lines a particular member of such a search domain may eventually be selected. Figure 2 illustrates what such a gradient may look like.

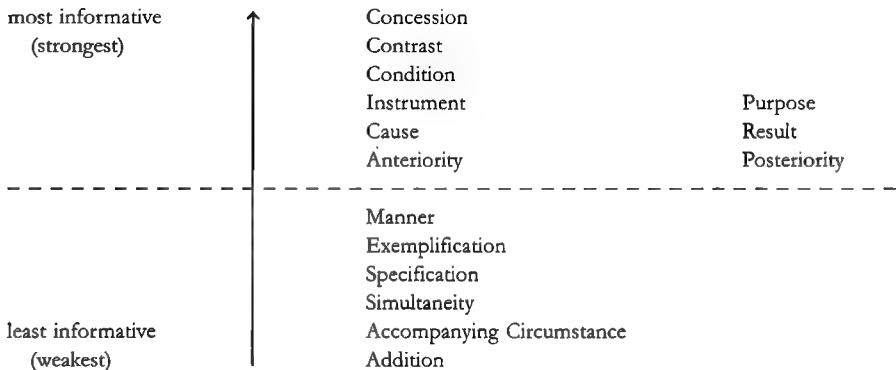


Figure 2. A scale of informativeness for semantic relations

The gradient shown in Figure 2 has been established for present-participial free adjuncts and absolutes lacking any lexical hint (conjunctions, connective adverbs, time adverbials, etc.) as to the interpositional relation(s) they express. The dividing line between “more” and “less informative” relations is motivated by the fact that the unmarked relation between the time intervals identified by the nonfinite constructions and the matrix clause is one of simultaneity or overlap (“while”, “when”). For a succession of time intervals to be identified, a higher amount of world knowledge is necessary. Not surprisingly, such chaining

of events was seen to be marked by means of augmenting devices much more frequently than “simultaneity” (cf. section 2.3). As most interclausal relations exhibit clear tendencies with respect to whether the propositions they like are typically coterminous or follow each other in time, they have accordingly been placed in the “less” or “more informative” part of the gradient. Thus, of the preferred interpretations of free adjuncts and absolutes, the interclausal relations belonging to the CAUSE group qualify as “more informative”, those of the SUPPLEMENTIVE group as “less informative”, and those of the TIME group partly as “more” (“anteriority”, “posteriority”), partly as “less” informative (“simultaneity”). On the basis of this gradient predictions can be made, too, as to which search domains in the top or bottom part will be available to nonfinite clauses headed by, for example, a past or perfect participle or introduced by an adverbial conjunction. This must suffice as a rough outline of the basis assumptions underlying this gradient. See Kortmann (1991 a: 118–132) for details concerning the internal ordering of the relations within these two parts, and problems that arise from the gradient in its current shape.

Viewed against this background, the differences in the distribution of interclausal semantic relations among the three types of constructions can be described as follows: there is a steady increase in the proportion of “more informative” relations from unaugmented absolutes (25 percent), via augmented absolutes (40 percent) to prototypical, i. e., unaugmented subject-controlled, free adjuncts (55 percent).²³ This immediately calls to mind iconicity principles as they have been formulated for the domain of interpropositional relations within the framework of functional typology, to the effect that an increasing degree of tightness of semantico-pragmatic linkage is formally mirrored by an increasing degree of morphosyntactic linkage. Compare Foley–Van Valin (1984: 271): “... it will always be the case that the strongest semantic relations will be expressed in the most tightly linked syntactic configurations found in the language, the weaker relations in the less tightly linked constructions.” Or similarly Givón (1990: 826): “the more two *events/states* are integrated semantically or pragmatically, the more will the *clauses* that code them be integrated grammatically.” Figure 3 represents the validity of these iconicity principles regarding the constructions investigated in this paper.

These principles seem to follow naturally from a pragmatic principle which has its origins in Atlas–Levinson’s (1981) *Principle of Informativeness* and, ultimately, Zipf’s (1949) *Principle of Least Effort* (cf. Kortmann 1991 a: 207–214). This pragmatic principle is based on the assumption that the addresser’s tendency to minimize his/her linguistic output (both in terms of units of speech production and semantic specificity) “... has as its immediate corollary an addressee’s maxim of inferential *maximization* ...” (Levinson 1987 a: 68). This leads Levinson

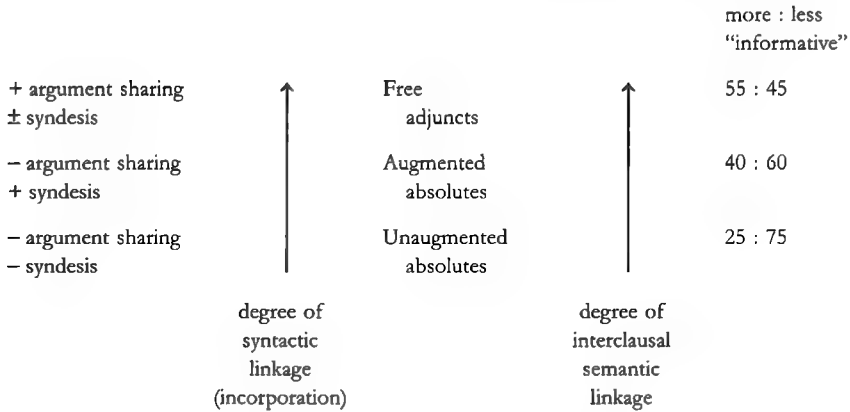


Figure 3: The correlation between semantic and syntactic linkage in free adjuncts and absolutes

(1987 a: 109) to the following proposal concerning the role of pragmatic inferences in identifying interpropositional relations and establishing coreference relations between referring expressions: "... reduced forms, and zero-anaphors in particular, tend to be associated with the most informative interpretations." Again, the above findings support this tendency. Free adjuncts are minimized both formally and semantically: they are "subjectless", and there exist virtually no restrictions as to which interpretations they allow. And indeed, as predicted by Levinson's principle, it is this construction which: (i) receives a "more informative" interpretation in the majority of cases; and (ii) is greatly preferred over the competing, less minimized construction (i. e., absolutes) in the domain of non-finite adverbial subordination.

It would seem most unnatural if such striking interpretative differences as they were found to exist between free adjuncts and absolutes were confined to English. The fact that these differences perfectly conform to predictions on the basis of general iconic and pragmatic principles suggests that we are confronted with a universal phenomenon here. In conclusion, I therefore hypothesize that in languages which allow both types of contextual converbs, especially where contextual converbs represent the only or predominant converb-type, it will generally be the case that the two differ with respect to the range and nature of their interpretations, and that they will do so in the following way: same subject converbs will: (i) generally allow a wider range of interpretations; and (ii) tend to express "more informative" interclausal relations. Different-subject converbs, on the other hand, will be restricted to a smaller set of interpretative options (typically reduced by interclausal relations of the "more informative" type), and the majority of them will tend to express "less informative" relations. Thus,

whatever the differences between the ranges of meanings may be which converbs in different languages may express (cf. Nedjalkov, this volume), this divergent interpretative behavior of same-subject and different-subject converbs, it is claimed, will be observable in any language.

5. Summary and outlook: English adverbial participles from a typological point of view

In conclusion, the major findings and claims of this study will be presented by way of answering the following questions:

- i. What does the typical English converb look like? More exactly, how does it fare with respect to the classificatory system proposed by Nedjalkov (this volume)?
- ii. To what extent are the properties of English adverbial participles language-specific, or characteristic of converbs in general? And given the latter, in which respects do they confirm universal tendencies formulated previously or give rise to predictions of new ones?

The prototypical English converb is the form in *-ing*, with an empty subject position controlled by the subject of the matrix clause and no augmenting device. However, the English converb may also have other nonfinite and, marginally, verbless heads, may have a syntactic subject of its own, and may be introduced by a sentential preposition. In Nedjalkov's terms, the English converb exhibits the following characteristics: (i) it is tetrafunctional (cf. section 2.2), possibly even pentafunctional, considering (!) its spreading use in the functional domains of prepositions (cf. Kortmann–Meyer 1992); (ii) it is a conjunctive, more exactly a contextual converb; (iii) it is a varying-subject converb, in that it allows both for free adjuncts and absolutes; and (iv) it is a temporally-neutral converb, i. e., it is not "... linked to a finite verb in a certain temporal form." (Nedjalkov, this volume) The only problematic classification of these is (ii). Although it is certainly true that the English converb standardly qualifies as contextual, there exist idiomatized uses of converbs which approximate the status of specialized converbs, e. g., *being*-constructions for causality (cf. [42]), or speech act qualifiers as in (43 b) for conditionality (cf. Kortmann 1991 a: 190–192). Moreover, present-participial converbs for the expression of "consecutive chaining" resemble narrative (coordinative) converbs; at the same time it must be admitted that, typically, the number of events chained is restricted to two (cf. subsection 4.2.1). It was also shown that several interclausal semantic relations, especially the preferred interpretations belonging to the "supplementive" group,

cannot be expressed by means of adverbial conjunctions (cf. section 4.1). The term *conjunctive verb* therefore fails to capture an important observation, viz. the possibility that there is a division of tasks between contextual converbs and finite clauses introduced by adverbial conjunctions in languages which make use of both.

The most interesting findings of this study concern the striking differences between same-subject and different-subject converbs, i. e., between free adjuncts and absolutes, and the (less spectacular, yet nonetheless telling) differences between augmented and unaugmented absolutes. These differences show up in the following areas: subject reference, syndesis, interpretation, and discourse pragmatics. With regard to SUBJECT REFERENCE, English adverbial participles, first of all, clearly confirm universal tendencies predicting that same-subject converbs will be much more frequent than both different-subject converbs and converbs whose empty subject position is not controlled by the matrix subject. Second, for converbs of the latter type (so-called *unrelated free adjuncts*) it is possible to formulate tendencies concerning the choice of their controller, amounting to a Controller Accessibility Hierarchy, which may well reflect universal tendencies, too (cf. section 3.1.1). Third, the majority of subjects of (*with*-) augmented absolutes exhibit no coreference at all with the matrix subject and, in general, a much lower degree of coreference than is observable for the subjects of unaugmented absolutes. The latter overwhelmingly stand in a part-whole relation to the referent of the matrix subject (cf. section 3.2). Ultimately, this suggests that, in English, SYNDESIS fulfils a different function for absolutes than it does for free adjuncts. Augmentation of free adjuncts serves the primary function of signalling explicitly the circumstantial relation holding between the adjunct and the matrix clause. For this function, the preposition *with* as default augmentor of absolutes is fundamentally unsuited. By contrast, the use of *with* seems to be primarily motivated by a very low degree of semantic, i. e., referential, integration of the absolute into the matrix clause for which, for reasons of acceptability and ease of processing, a higher degree of syntactic integration compensates. The hypothesis that syndesis fulfils these different tasks may also explain why syndetic linkage is only marginally found for free adjuncts (5.5 percent), while it is very frequent for absolutes (45 percent). Securing in the first place the acceptability of the complex sentence is a more fundamental task than specifying the interclausal semantic relation, given that the purpose of the latter to a certain extent goes against the prime motivation for the use of contextual converbs, i. e., their semantic indeterminacy.

This leads us to a comparison of free adjuncts and absolutes concerning their INTERPRETATION. In short: free adjuncts admit of a wider range of interpretations, exhibit different preferences as to individual circumstantial relations,

and express, by and large, circumstantial relations of a different quality than absolutes do. The majority of subjectless constructions express "more informative" relations, whereas absolutes overwhelmingly express "less informative", especially "supplementive" relations (cf. subsection 4.2.1). Interestingly, these differences are most pronounced for free adjuncts and *unaugmented* absolutes. Absolutes syndetically linked to the matrix clause assume an intermediate position (cf. subsection 4.2.2). But, in fact, this is only to be expected. On considering these interpretative differences, we are confronted with an iconic principle, such that tighter syntactic linkage (via argument sharing and, less importantly, syndesis) iconically reflects tighter interclausal semantic linkage. This iconic principle, in turn, follows naturally from pragmatic principles which predict inferential maximization, for instance the choice of the semantically most specific interpropositional relations, as an immediate corollary of a minimization of processable linguistic material (cf. section 4.3). Ultimately, therefore, it is a universal tendency which is claimed to show itself in the differences observed for English free adjuncts and absolutes: in any language allowing for both constructions, same-subject and different-subject contextual converbs will differ with respect to the range and quality of their interpretations; moreover, these differences will follow the pattern sketched for English. Pursuing further the idea of a gradient of informativeness for interclausal semantic relations, one may perhaps also predict that specialized converbs will typically express "more informative" relations. This prediction follows from the fact that the function of specialized converbs comes closest to one of adverbial conjunctions in European languages, and that the circumstantial relations signalled by adverbial conjunctions overwhelmingly qualify as "more informative".

Finally, free adjuncts and absolutes seem to differ with respect to their DISCOURSE-PRAGMATIC BEHAVIOR. It should be recalled (cf. section 2.3) that unaugmented absolutes almost exclusively (90 percent) follow their matrix clause. By contrast, this is true for only 60 percent of the free adjuncts; one in three free adjuncts precedes its matrix clause. These differences in position, together with the interpretative differences discussed above, need to be viewed against the background of recent research on the position-dependent discourse functions of adverbial clauses (Chafe 1984, Thompson 1985, Ramsay 1987). Preposed adverbial clauses, it was consistently found, tend to serve a frame-setting function for the material that follows (in the main clause). Furthermore, they "... seem to have wider-scoped *anaphoric* contextual grounding. Both their referential and thematic links project far backward into the preceding discourse." (Givón 1990: 847). Postposed adverbial clauses, on the other hand, serve a much more "local" function by exhibiting a high degree of referential continuity with the matrix clause and by providing more specific or additional information to the

matrix proposition. Chafe describes the discourse functions of initial and final adverbial clauses in terms of “guidepost” vs. “afterthought”. Preposed clauses orient the reader towards the information in the matrix clause, whereas detached postposed clauses “... more in the nature of coordinated clauses ... comment on a time, a condition, a cause, etc., relevant to the preceding main clause.” (Chafe 1984: 448) Moreover, postposed adverbial clauses tend to modify “... only part of what was stated in the main clause – not everything in that clause.” (1984: 447) Judging the results of this study in the light of these observations, it is easy to see that unaugmented absolutes meet all the criteria for prototypical “afterthoughts”. They are postposed as well as intonationally detached from the matrix clause, express for the most part “supplementive” relations, and exhibit a high degree of coreference with noun phrases in the matrix clause. Free adjuncts, on the other hand, allow a wider range of (“more informative”) interpretations and are thus better suited to assume a “guidepost” function than absolutes are. Also, free adjuncts may have a “perfect participle” as head, which is largely impossible for absolutes; as was pointed out in section 4.2.1, preposed perfect-participial free adjuncts typically fulfill a back-referencing function. The discourse-pragmatic differences between free adjuncts and (augmented and unaugmented) absolutes, we therefore conclude, are differences in degree. The predominant discourse function of all three constructions is a “local” one. But this is true to a much higher degree for unaugmented absolutes (90 percent) than it is for free adjuncts (60 percent), with augmented adjuncts again assuming a position in between the two (75 percent). This, in turn, ties in neatly with the differences we observed with regard to their interpretation and the referential nature of their subjects. One can expect similar discourse-pragmatic contrasts between same-subject and different-subject converbs for all those languages which impose no general restriction on the positioning of subordinate (adverbial) clauses.

So much for the major findings concerning the semantics and pragmatics of adverbial participles in English, and their implications from a cross-linguistic perspective. In retrospect, one fact must not be overlooked however. As, for example, Bisang (this volume) points out, “... converb languages very often display an almost complete lack of conjunctions ...” From this point of view, although it stands out among the Germanic languages with respect to its predilection for the use of adverbial participles, English neither is nor looks a likely candidate for a converb language. As the result of a steady process of enlargement and semantic differentiation from its earliest stages onwards (cf. Kortmann 1994), present-day English has an elaborate inventory of adverbial conjunctions and makes extensive use of them in finite adverbial clauses – in all registers, one should stress, and especially in the spoken language. Adverbial participles,

that is, represent no more than a secondary means for the expression of inter-clausal semantic relations in the domain of adverbial subordination.

Notes

1. See Kortmann (1991 a: 17–23) for a survey and discussion; for details concerning the composition of the text material see Kortmann (1991 a: xiii, 38–39). All examples quoted in this paper are taken from the corpus unless specified otherwise.

The author would like to thank Bernard Comrie and Ekkehard König for their detailed comments.

2. As the orientation of this paper is entirely synchronic, there is no section discussing the grammaticalization processes which the heads of participial clauses in English (cf. section 2.1) have undergone or are, to some extent, still undergoing. These processes have received detailed discussion in König–Kortmann (1991), Kortmann (1992), Kortmann–König (1992) and Kortmann–Meyer (1992).
3. Due to the unclear distinction between *converbs proper* and *conjunctive verbs* the former also enter the picture, though (see section 2.2.2).
4. My warnings against unreflected trust in rather impressionistic generalizations, useful though they may be in a first survey, should not be taken as reflecting an obsession with research based on large corpora or a lack of realism as to what is possible in typological research and what is not. Methodologically more satisfactory analyses, striving for representativeness and validity of the results across different types of discourse, may not be possible for all languages, but they are for many more of those languages for which there is an abundance of text material available.
5. Nonfinite clauses marked for “anterior orientation” can be used with definite past time adverbials and thus in a wider range of contexts than their finite counterparts (cf. Stump 1985: 220–235 and Comrie 1976: 55).
6. Examples (20 a), (21) and (22) are taken from Nedjalkov (this volume). Quirk et al. (1985: 1292) identify yet a further syntactic function of the *ing*-form, namely that corresponding to the Latin *gerundive* in modal expressions like
 - (i) *There was no mistaking that scream.*
 (“No one could mistake that scream.”)
7. The English data make it appear rather doubtful whether König–van der Auwera (1990: 347) are right in viewing as the basic use of the present participle its use as predicative head of free adjuncts (1270 occurrences in 450 000 words), and not its use in the progressive (2231 occurrences in 450 000 words; cf. Kortmann 1985). It should further be noted that participles in construction with certain finite basic-level verbs expressing bodily positions (especially *sit*, *stand*, *lie*) or motion (*come*, *go*) may be given an analysis resembling that of the progressive:
 - (i) *They sat drinking tea.*
 - (ii) *They stood watching the people in the audience.*
 - (iii) *She came running towards me.*
 - (iv) *We went fishing yesterday.*
8. Quirk et al. (1985: 1290–1292) do away with the term *gerund* completely, suggesting a gradient from deverbal noun (*some paintings of Brown's*) via nominal verb to participle. The borderline between the latter two is reached where the *ing*-form is no longer modified by an adjective but by an adverb:

- (i) Brown's deft painting of his daughter *is a delight to watch*.
- (ii) Brown's deftly painting of his daughter *is a delight to watch*.

Pullum (1991) provides further arguments in support of an analysis of the *ing*-form in (23') as a non-nominal form. The internal syntax of such constructions, Pullum (1991: 786) shows, is verbal, the *ing*-form therefore "... is not a verbal noun, but a verb buried inside the nonfinite verb-phrase head of a noun phrase."

9. Jespersen (1940: 5) defines *nexus* as "... a combination implying predication and as a rule containing a subject and either a verb or a predicative or both." Thus, properly speaking, the *ing*-constructions in (23 c-e) exemplify what he discusses under the heading "nexus as object". Compare also Jespersen (1940: 140-150, 413-417) on the problems involved in the participle-gerund distinction.
10. This "syntactic downgrading" of the participle is mirrored by van der Auwera's analysis of the participle in (23 c), along with the ones in (23 a-b), as a *dominant participle*, and of the ones in (23 d) and (23 e) as *adjoined participles*. These terms are to be seen within the framework of Simon Dik's Functional Grammar.
11. In this respect, particularly due to the restriction of such problematic participles to sentence-final position, English differs from German. In German, a nondetached participle which is not located at the sentence periphery cannot be used as an adverbial participle. In main clauses, such participles follow the main predicate (i), especially if it is complex as in (ii) and (iii), where the participle is part of the *Satzklammer*. In subordinate clauses, these participles precede the main predicate, as in (iv):

- (i) *Er ging lächelnd nach Hause.*
- (ii) *Er blickte sie lächelnd an.*
- (iii) *Er hatte sie lächelnd angeblickt.*
- (iv) *Er wurde verfolgt, weil er sie lächelnd angeblickt hatte.*

In traditional German grammar, this adverb-like use of participles (and similarly adjectives) is discussed under the heading of *sentence adjectives* (Duden 1984: 581-582; for a detailed discussion cf. Pusch 1980: 124-153). A more appropriate term for this use of participles and adjectives is *copredication* (cf. Haspelmath, this volume).

12. They can only take *-ing* clauses and nonpredicative noun phrases as complements, whereas there exists no such restriction for conjunctions proper (cf. Stump 1985: 12; similarly Quirk et al. 1985: 1005-1006).
13. Why it is "cause/reason" that cannot be explicitly marked on English free adjuncts is unclear. In Modern German, for instance, this is possible; what is impossible here is augmentation by temporal subordinators. Before deciding on whether these restrictions represent totally unpredictable quirks of individual languages or whether there is, after all, a pattern underlying them, more cross-linguistic research on such constraints on augmentation is necessary. The tendency for concessive adjuncts to exhibit by far the greatest predilection for augmentation is clearly confirmed by Bäcklund's study of augmented adjuncts in the Lancaster-Oslo-Bergen, Brown, and London-Lund Corpora of English (1984: 126-142).
14. Free adjuncts controlled by the predication or whole proposition of a preceding matrix clause are often hard to distinguish from what Quirk et al. (1985: 1118-1120) call *sentential relative clauses*. Different from these, however, as can be seen from (44i), free adjuncts with this kind of controller may also precede their matrix clause. Note that in section 3.1 the linguistic material referring to the controller is indicated through the use of a contrasting type style (e.g. roman type within italics).

15. From a cross-linguistic point of view, *NP* and *nominal constituent* in (45) and (46) are meant to cover those instances, too, where a subject just shows up as an inflectional marker on the matrix verb, as in Latin.
16. This is not to deny that there is certainly some validity to Beukema's configurational hierarchy. It renders appropriately the distribution of controller NPs among different grammatical functions (cf. [45 d]), and can be read as an implicational hierarchy as it is assumed in the statement in (46 d). But this is not at issue here; what is rejected is the idea that it plays a central part in the individual process of determining the controller of a free adjunct.
17. Compare also Foley–Van Valin (1984: 114–115) on English as a language which makes extensive use of the pivot notion in the domain of interclausal linkage. More exactly, English is classified as a language with pragmatic pivots, i.e., pivots which are primarily determined by "... the pragmatic considerations of cross-clause coreference and discourse topicality ...". Similarly, Levinson (1987 a: 120) concludes that "... , especially in the area of control facts, the [syntactic] patterns consonant with ... pragmatic principles appear in English to be thoroughly grammaticalized; ...", conceding, however, that not all control phenomena in English can be explained as a grammaticalization of pragmatic principles (Levinson 1987 b: 420).
18. This classification is modelled on Berent's proposal (1975: 14–15) of a coreference hierarchy for the subjects of absolutes.
19. The degree of coreference between the subjects of absolutes as reflected in Table 5 can therefore be viewed as resulting from two kinds of functional pressure: in the first place, by the equilibrium of semantic and syntactic integration, and secondly by communicational efficiency due to the existence of a competing "subjectless" construction, i.e., free adjuncts.
20. Only for just over one percent of the data was it impossible to decide on the strongest of several possible interpretations (cf. "More than one relation possible"). Where present participial adjuncts were indeterminate between a simultaneous and a consecutive interpretation, this has been indicated by "?Simultaneity/Anteriority" or "?Simultaneity/Posteriority". Note that the interclausal relations lumped together under "other relations" are obligatorily introduced by complex prepositions or conjunctions.
21. Quirk et al. (1985: 1124) use the term *supplementive* in a very different sense. *Supplementive clauses* is their cover term for unaugmented free adjuncts and absolutes, in general.
22. Halliday (1985: 216) notes, for example, that a finite *because*-clause neutralizes the distinction between unintended and intended consequence made by the adverbial gerunds in (i) and (ii) respectively:
 - (i) *With leaving out two questions she failed the exam.*
 - (ii) *By leaving out two questions she (was able to concentrate on what she knew best and so) passed the exam.*
 From a cross-linguistic point of view, the weakness of this term is that conjunctions lack the extent to which "conjunctive" converbs can be semantically indeterminate, i.e., compatible with several interpretations even given a special context.
23. Just as one would expect, the share of augmented free adjuncts (recall: just 5.5 percent of some 1,400 constructions) expressing a "more informative" interclausal relation is drastically higher (more than 90 percent) than for unaugmented adjuncts.

References

- Atlas, Jay D.–Stephen C. Levinson
 1981 "If-clefts, informativeness and logical form: Radical pragmatics", in: Peter Cole (ed.), 1–61.

- Bäcklund, Ingegerd
 1984 *Conjunction-beaded abbreviated clauses in English*. (Acta Universitatis Upsaliensis, Studia Anglistica Upsaliensia 50.) Uppsala: Almqvist and Wiksell.
- Bechert, Johannes—Guliano Bernini—Claude Buridant (eds.)
 1990 *Toward a typology of European languages*. (Empirical Approaches to Language Typology 8.) Berlin: Mouton de Gruyter.
- Berent, Gerald B.
 1973 "Absolute constructions as 'subordinate clauses'", in: Corum—Smith—Stark—Weiser (eds.), 147–154.
 1975 "English absolutes in functional perspective", in: Grossman—San—Vance (eds.), 10–23.
- Beukema, Frits H.
 1985 "Lexical structures in English free adjuncts", in: Hoppenbrouwers—Seuren—Weijters (eds.), 190–199.
- Biber, Douglas
 1988 *Variation across speech and writing*. Cambridge: Cambridge University Press.
- Bickel, Balthasar
 1991 *Typologische Grundlagen der Satzverkettung*. Zürich: Seminar für Allgemeine Sprachwissenschaft der Universität Zürich.
- Bisang, Walter
 this volume "Verb serialization and converbs—differences and similarities".
- Brugman, Claudia—Monica Macaulay (eds.)
 1984 *Proceedings of the tenth annual meeting of the Berkeley Linguistic Society*. Berkeley: Berkeley Linguistic Society.
- Bungarten, Theo
 1976 *Partizipialkonstruktionen in der deutschen Gegenwartssprache*. Düsseldorf: Schwann.
- Chafe, Wallace
 1984 "How people use adverbial clauses", in: Brugman—Macaulay (eds.), 437–449.
- Cole, Peter (ed.)
 1981 *Radical Pragmatics*. New York: Academic Press.
- Comrie, Bernard
 1976 *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.
- Corum, Claudia—Cedric Smith—Stark—Ann Weiser (eds.)
 1973 *You take the high node and I'll take the low node*. Papers from the Comparative Syntax Festival. Chicago: Chicago Linguistic Society.
- Duden
 1984 *Grammatik der deutschen Sprache*. (4th edition.) revised by Günther Drosdowski et al. Mannheim—Wien—Zürich: Dudenverlag.
- Edgren, Eva
 1971 *Temporal clauses in English*. (Acta Universitatis Upsaliensis, Studia Anglistica Upsaliensia 9.) Uppsala: Almqvist—Wiksell.
- Einarsson, Stefán
 1949 *Icelandic*. Baltimore: The Johns Hopkins Press.
- Emonds, Joseph E.
 1976 *A transformational approach to English syntax*. New York: Academic Press.
- Filipovič, Nada
 1977 *Die Partizipialkonstruktionen in der deutschen und dichterischen Prosa von heute*. Tübingen: Narr.

Filppula, Markku

- 1991 "Subordinating *and* in Hiberno-English syntax: Irish or English origin?", in: Ureland–Broderick (eds.), 617–631.

Foley, William A.–Robert D. Van Valin

- 1984 *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.

Friederich, Wolf

- 1978 *Die infiniten Formen des Englischen*. (5th edition.) Munich: Hueber.

Givón, Talmy

- 1990 *Syntax. A functional-typological introduction*, Vol. 2. Amsterdam–Philadelphia: Benjamins.

Greenbaum, Sidney

- 1973 "Adverbial *-ing* participle constructions in English", *Anglia* 91: 1–10.

Grossman, Robin E.–L. James San–Timothy J. Vance (eds.)

- 1975 *Papers from the parasession on functionalism*. Chicago: Chicago Linguistic Society.

Haiman, John

- 1985 *Natural Syntax. Iconicity and erosion*. Cambridge: Cambridge University Press.

Haiman, John–Sandra A. Thompson (eds.)

- 1988 *Clause combining in grammar and discourse*. Amsterdam–Philadelphia: Benjamins.

Halliday, Michael A. K.

- 1985 *An introduction to functional grammar*. London: Edward Arnold.

Haspelmath, Martin

- this volume "The converb as a cross-linguistically valid category".

Helbig, Gerhard

- 1983 *Studien zur deutschen Syntax*, Vol. 1. Leipzig: Verlag Enzyklopädie.

Hoppenbrouwers, G. A. J.–P. A. M. Seuren–A. J. M. M. Weijters (eds.)

- 1985 *Meaning and the lexicon*. Dordrecht: Foris.

Horn, Laurence C.

- 1984 "Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature", in: Deborah Schiffrin (ed.), 11–42.

Hüllen, Werner–Rainer Schulze (eds.)

- 1988 *Understanding the lexicon: Meaning, sense, and world knowledge in lexical semantics*. Tübingen: Niemeyer.

Ihms, Henry

- 1981 "Das 'Half-gerund'. Ein Irrweg sprachlicher Deutung", *Die Neueren Sprachen* 80: 202–207.

Jespersen, Otto

- 1931 *A modern English grammar*. Part IV: *Syntax*, Vol. 3. Heidelberg: Winter.

- [1948] [reprinted] *The philosophy of grammar*. London: Allen and Unwin.

- 1940 *A modern English grammar*. Part V: *Syntax*, Vol. 4. Copenhagen: Munksgaard.

Keenan, Edward–Bernard Comrie

- 1977 "Noun phrase accessibility and universal grammar", *Linguistic Inquiry* 8: 63–99.

Kellermann, Günther–Michael D. Morrissey (eds.)

- 1992 *Diachrony with synchrony: Language history and cognition*. Frankfurt/M: Lang.

Klein-Andreu, Flora (ed.)

- 1983 *Discourse perspectives on grammar*. New York: Academic Press.

König, Ekkehard

- 1985 "On the history of concessive connectives in English. Diachronic and synchronic evidence", *Lingua* 66: 1–19.

- König, Ekkehard-Bernd Kortmann
 1991 "On the reanalysis of verbs as prepositions", in: Gisa Rauh (ed.), 109-125.
- König, Ekkehard-Elizabeth Closs Traugott
 1988 "Pragmatic strengthening and semantic change: The conventionalizing of conversational implicature", in: Hüllen-Schulze (eds.), 110-124.
- König, Ekkehard-Johan van der Auwera
 1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Bechert-Bernini-Buridant (eds.), 337-355.
- Kortmann, Bernd
 1985 *The interaction of imperfective aspect and situation class in present-day British English*. Duisburg: Linguistic Agency University of Duisburg.
 1988 "Freie Adjunkte und absolute Konstruktionen im Englischen und Deutschen", *Papiere zur Linguistik* 38: 61-89.
 1991 a *Free adjuncts and absolutes in English: Problems of control and interpretation*. London and New York: Routledge.
 1991 b "The triad 'tense-aspect-Aktionsart'-Problems and possible solutions", in: Carl Vetters-Willy Vandeweghe (eds.), 9-30.
 1992 "Reanalysis completed and in progress: Participles as source of prepositions and conjunctions", in: Kellermann-Morrissey (eds.), 429-453.
 1994 *Adverbial Subordinators in the Languages of Europe - Towards a typology and history*. (EURO-TYP Working Paper V. 8.) Strasbourg: European Science Foundation.
- Kortmann, Bernd-Ekkehard König
 1992 "Categorial reanalysis: The case of deverbal prepositions", *Linguistics* 30: 671-697.
- Kortmann, Bernd-Paul Georg Meyer
 1992 "Is English grammar more explicit than German grammar, after all?", in: Markus-Mair (eds.), 155-156.
- Kühner, Raphael-Carl Stegmann
 1966 *Ausführliche Grammatik der lateinischen Sprache*. Part II: *Satzlehre*, Vol. 1. Hannover: Hahnsche Buchhandlung.
- Lehmann, Christian
 1988 "Towards a typology of clause linkage", in: Haiman-Thompson (eds.), 181-225.
- Levinson, Stephen C.
 1987 a "Minimization and conversational inference", in: Verschueren-Bertucci-Papi (eds.), 61-129.
 1987 b "Pragmatics and the grammar of anaphora: A partial pragmatic reduction of binding and control phenomena", *Journal of Linguistics* 23: 379-434.
- Mann, William C.-Sandra A. Thompson
 1987 *Rhetorical structure theory: A theory of text organization*. Marina del Rey: Information Sciences Institute.
- Markus, Manfred-Christian Mair (eds.)
 1992 *New departures in contrastive linguistics*. (Innsbrucker Beiträge zur Sprachwissenschaft.) Innsbruck: Institut für Anglistik der Universität Innsbruck.
- Masica, Colin P.
 1976 *Defining a linguistic area: South-Asia*. Chicago-London: University of Chicago Press.
- McCawley, James D.
 1983 "What's with *with*?", *Language* 59: 271-287.
- Mohanan, K. P.
 1983 "Functional and anaphoric control", *Linguistic Inquiry* 14: 641-674.
- Nedjalkov, Vladimir P.
 this volume "Some typological parameters of converbs".

- Poutsma, Hendrik
1926 *A grammar of late modern English. Part II/2: The verb and the particles.* Groningen: Noordhoff.
- Pullum, Geoffrey, K.
1991 "English nominal gerund phrases as noun phrases with verb-phrase heads", *Linguistics* 29: 763–799.
- Pusch, Luise F.
1980 *Kontrastive Untersuchungen zum italienischen 'gerundio': Instrumental- und Modalsätze und das Problem der Individuierung von Ereignissen.* Tübingen: Niemeyer.
- Quirk, Randolph–Sidney Greenbaum–Geoffrey N. Leech–Jan Svartvik (eds.)
1972 *A grammar of contemporary English.* London: Longman.
1985 *A comprehensive grammar of the English language.* London: Longman.
- Ramsay, Violeta
1987 "The functional distribution of preposed and postposed 'if' and 'when' clauses in written discourse", in: Russel S. Tomlin (ed.), 383–408.
- Rauh, Gisa (ed.)
1991 *Approaches to prepositions.* Tübingen: Narr.
- Sakkakibara, Hiroaki
1982 "With-constructions in English", in *Studies in English Literature.* Tokyo: English Literary Society of Japan, 79–95.
- Scheurweghs, G.
1969 *Present-day English syntax.* (4th edition.) London: Longman.
- Schiffrrin, Deborah (ed.)
1984 *Meaning, form and use in context: Linguistic applications.* Washington, DC: Georgetown University Press.
- Svartvik, Jan–Randolph Quirk (eds.)
1980 *A corpus of English conversation.* Lund: Gleerup.
- Stassen, Leon
1985 *Comparison and universal grammar.* Oxford: Blackwell.
- Stump, Gregory T.
1985 *The semantic variability of absolute constructions.* Dordrecht: Reidel.
- Sweet, Henry
1898 *A new English grammar. Part 2: Syntax.* Oxford: Clarendon Press.
- Thompson, Sandra A.
1983 "Grammar and discourse: The English detached participial clause", in: Flora Klein-Andreu (ed.), 43–65.
1984 "Subordination' in formal and informal discourse", in: Deborah Schiffrrin (ed.), 85–94.
1985 "Grammar and written discourse: Initial vs. final purpose clauses in English", *Text* 5: 55–84.
- Tomlin, Russell S. (ed.)
1987 *Coherence and grounding in discourse.* Amsterdam–Philadelphia: Benjamins.
- Ureland, Per Sture–George Broderick (eds.)
1991 *Language contact in the British Isles.* Tübingen: Niemeyer.
- van der Auwera, Johan
1990 *Coming to terms.* [Unpublished postdoctoral thesis, University of Antwerp.]
- van Riemsdijk, Henk
1978 *A case study in syntactic markedness: The binding nature of prepositional phrases.* Dordrecht: Foris.

Verschueren, Jef–Marcella Bertuccelli-Papi (eds.)

1987 *The pragmatic perspective. Selected papers from the 1985 International Pragmatics Conference.* Amsterdam–Philadelphia: John Benjamins.

Vetters, Carl–Willy Vandeweghe (eds.)

1991 *Perspectives on Aspect and Aktionsart.* (Belgian Journal of Linguistics 6.) Brussels: Editions de l'Université de Bruxelles.

Visser, Fredericus Th.

1972 *An historical syntax of the English language.* Part II/2: *Syntactical units with one verb.* Leiden: Brill.

Zipf, George Kingsley

1949 *Human behavior and the principle of least effort.* Cambridge, MA: Addison-Wesley Press.

Russian converbs: A typological outline*

Daniel Weiss

1. Introduction

1.1. Participles vs. adverbial participles: The different forms

Modern Standard Russian, at least its elaborate uses, would have merited the label Φιλομέτοχος 'participle-loving', coined by ancient Greek grammarians. This holds for the textual frequency of both Russian participles and converbs; it does not mean, however, that the inventory of forms also abounds in different paradigms distinguished neatly by their syntactic function. On the contrary: if the definitions of converbs given in Nedjalkov (this volume) and Haspelmath (this volume) are taken seriously, the class of converbs in Russian comprises only one series of verbal forms: only the so-called *deepričastija*, i. e., the indeclinable adverbial participles, may be said to be special devices for the nonfinite expression of adverbial subordination (or secondary predication, a term more widespread among Slavists).¹ To limit our discussion to these forms would, however, be rather artificial in my opinion. The point is that the *deepričastie* paradigms lack passive forms; consequently, the adverbial function has to be fulfilled by other forms. This gap is filled by ordinary participles (*pričastija*), which are inflected like adjectives for number, gender, animacy and case (the two latter categories being, however, irrelevant for the adverbial function). In other words: there is a fundamental asymmetry between the active and the passive voice in that the former allows the distinction of forms inflected like adjectives and forms without such inflection, whereas the latter knows only inflected forms.

Since the morphological paradigms and the restrictions imposed on the various forms are rarely stated in full by the authoritative grammars, a short glance at them may be useful: they are shown in Table 1.

Since the second series of passive participles is practically never mentioned (even Švedova 1980 ignores it), its use may be illustrated by the following authentic example:

- (1) *Éto byla ta samaja Frosja, vydavavšajasja im za*
this was the same Frosja present-PART.PRET.IPF.REFL he-INSTR as
ego ženú.
his wife
'This was the same Frosja, presented by him as his wife'

Table 1. Russian participles and converbs: the paradigms

Active	
Adverbial participle, i. e. converb (<i>deepričastie</i>)	Participle (<i>pričastie</i>)
suffixes: <i>-a</i> , <i>-v(i)</i>	suffixes: <i>-ašč-</i> / <i>-ušč-</i> , <i>-(v)šč-</i>
indeclinable	declinable
vernacular origin	borrowed from Church Slavonic
Passive	
Type 1	suffixes: <i>-n(n)-</i> , <i>-t-</i> , <i>-m-</i> declinable two main series: "short forms" with predicative function; "long forms" for the remaining functions optional periphrastic form with adverbial function: <i>buduči</i> (converb of the auxiliary <i>byť</i>) + <i>pričastie</i> e. g. <i>buduči obvinjaem / obvinen</i> vernacular origin; only <i>-m-</i> forms borrowed from Church Slavonic
Type 2	active <i>pričastie</i> with postfix <i>-sja</i> : <i>-ašč-ij-sja / -ušč-ij-sja</i>

Let us note that none of the cited types (except the perfective passive participles with *-n(n)-*/*-t-*) is wholly productive: e. g., there exist entire classes of verbs for which the *deepričastie* with *-a* or the *pričastie* with *-ašč-*/*-ušč-* are lacking. This reminds one the state of affairs in many other languages; in German or Polish for example, transitive verbs and intransitive verbs denoting controlled activities have no participle expressing anteriority. Yet, in the light of the preference for converbs and participles in Russian to be described below, this defectiveness seems rather surprising.

1.2 The functional distribution

As pointed out before, attributive and adverbial uses are neatly distinguished in the active forms, whereas the passive participles are syncretic from a syntactic point of view.² The relevant functional distribution is shown in Figure 1. (according to the schematic representation presented in König-van der Auwera 1990; the prototypical function has been marked off by double frames).

"Object nexus" denotes cases like *Ja našel ee spjaščej* 'I found her sleeping'. The predicative use of passive participles is attested in finite perfective verbal

forms such as *On byl arestovan* 'He was arrested', where they are accompanied by the auxiliary *byt* 'to be'. As for the absolute use of the *deepričastie*, see below, section 4.

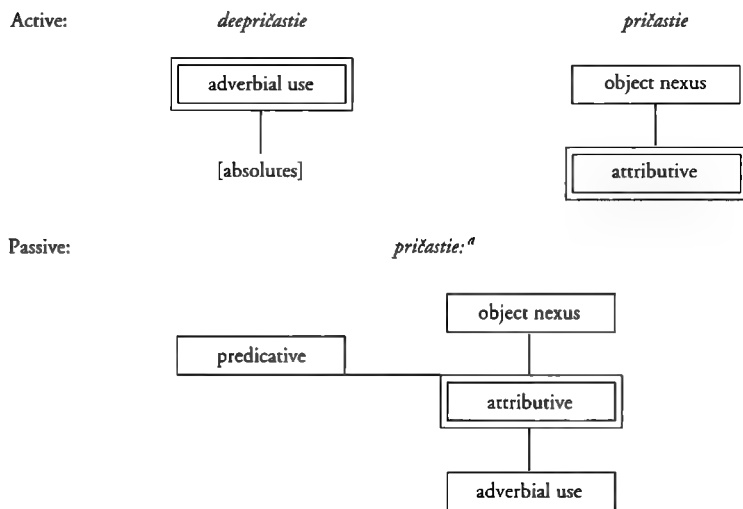


Figure 1. Russian participles and converbs: syntactic functions

Note: ^a Barnetová et al. (1979: 209) cite the converb *strojas* which, according to them, may have passive meaning. However, since no such forms are to be found in real texts, they are to be considered as fictitious.

Thus, we may state that the *deepričastie* functions exclusively as converb, whereas the passive *pričastie* fulfils this function among others, its main function being the attributive one.³ Nevertheless, when used as adverbials, the passive *pričastija* share all syntactic, semantic and pragmatic properties of the active *deepričastija*, thus behaving like true converbs. Moreover, there exists a periphrastic series of forms, composed of the *deepričastie* of the auxiliary *byt* and a passive participle, e.g., *buduči upotreblen* 'being used' (see next section). These forms sound bookish, but are specialized for adverbial function and therefore real converbs. For all these reasons it does not seem justified to exclude passive participles from this study.

Some authors consider the following examples as manifestations of a separate function:

- (2) *On vernulsja udivlennyj/ulybajas*'.
 he returned astonish-PART.PF.PASS./smile-CONV
 lit. 'He returned astonished/smiling.'

This use, which can be rendered in English only with difficulty, differs from the usual adverbial pattern in that the converb is not detached prosodically from the main verb and must be postposed; the effect achieved by this technique is one of greater closeness between the two actions (it entails for example cotemporality, cf. Givón 1990: 840), which sometimes even merge into one complex action (in such cases, the converb is considered to modify the main verb). It seems evident that more often than not, speakers have no free choice between detachment and nondetachment: the latter tends to prevail. The conditions which allow for nondetachment have not yet been adequately explicated, however. As shown by our example, both participle and adverbial participle may be used in this manner, but the same is valid for adjectives, compare:

- (2') *On vernulsja blednyj.*
 he returned pale
 'He returned pale.'

For the purpose of the present paper, we will treat this construction as a subtype of the adverbial use.

Note by the way that "adverbial" is by no means restricted to "free adverbials" (i.e., *circonstants*) in the sense of valency grammar. The converb may in Russian occupy the position of an obligatory actant of the main verb, as the example *provodit ves' den' igraja* 'spend the whole day playing' shows; this is, however, a peripheral use. Whenever the adjunct is optional, the actantial status of the converb may be somewhat dubious, compare:

- (3) *Ona udivilas', uvidev menja.*
 she was-astonished seeing-PF me
 'She was astonished at seeing me.'

Note that *Ona udivilas'* sounds perfect. Of course, one can argue that nobody would question the actantial status of

- (3') *Ona udivilas' tomu, što uvidela ego.*
 she astonished-was this-DAT that saw him
 'She was astonished at the fact that she saw him.'

But, what about the variant with adverbial clause? Most linguists would surely consider it to be a free adverbial:

- (3'') *Ona udivilas', kogda/potomu što uvidela ego.*
 she astonished-was when/because saw him
 'She was astonished when/because she saw him.'

The problem is that neither interpretation (3') nor (3'') can be definitely attributed to the converb in example (3). It certainly realizes a semantic valency of the main verb (in the sense of Apresjan 1974: 119–120), but the question of its syntactic actancy should be left open for the time being.⁴ In any case, the use of converbs as actants of other predicates can be considered peripheral in Russian (as in other European languages).

To be complete, one may mention one additional use of the participles in both voices: used without head noun, they become substantivized, as in examples like *sidjaščie za stolom* 'those sitting at the table' or *najdennoe* 'that which was found'. Note that this is a regular syntactic process which must not be confused with isolated lexicalizations such as *obvinjaemyj* 'the accused'.

The predicative use of the passive participles is marked morphologically by the short form, e.g., *On byl arestovan* 'He was arrested' (in all the other uses, we have only long forms such as *arestovannyj*). Formal means also serve to distinguish the remaining three functions from each other. Interestingly enough, the object nexus has in recent times undergone a syntactic change which allows us to distinguish it more neatly from the attributive function: instead of the older variant with the double accusative (for example, *My videli soldata spjaščego*, still frequent in the first half of the nineteenth century), we have now the instrumental (*My videli soldata spjaščim*, 'we saw the soldier sleeping'). As to the distinction between attributive and adverbial function with passive forms, case and word order are crucial: in oblique cases, only attributive use is possible, a participle not in immediate contact with its head noun (e.g., in sentence final position) allows only the adverbial reading, and even with a head noun in the nominative, the adverbial function is expressed by prosodic isolation if the participial phrase precedes the head noun, compare:

- (4) a. *Obodrennyj vseobščimi applodismentami, orator načal klanjat'sja.*
 'Encouraged by the general applause, the orator began to bow.' [adverbial]
 b. *Obodrennyj vseobščimi applodismentami orator načal klanjat'sja.*
 'The orator, who was encouraged by the general applause, began to bow.' [attributive]

In this way, the two functions merge only when the head noun is in the nominative and the participial phrase follows it immediately, cf. *orator, obodrennyj vseobščimi applodismentami, ...*⁵ On the whole, we may therefore conclude that the various syntactic functions of participles are quite neatly separated from each other.

The stylistic value of the different functions is not identical. None of the uses described can be called colloquial, but despite the indications in many hand-

books, *deepričastija* and passive *pričastija* with adverbial function do occur in spoken language, especially when constituting short phrases which are not separated prosodically from the main predicate. The same is all the more true for finite perfective passive verbs, where the participle is simply unavoidable. On the other hand, attributive participle constructions are restricted to formal, elaborated style, even if some examples may be found in spontaneous speech, as in:

- (5) B *ja ee ne znaju?*
 'Do I not know her?'
 A *znaete, konečno.*
 'You know her, of course'
 B *znaju?*
 'I know her?'
 A *nu ona filologinja že.*
 'Well, she is a philologist'
 B *da?*
 'Oh, is she?'
 A *konečno, tol'ko davno končivšaja.*
 'Of course, only having graduated long ago'

2. Time and aspect

The principal factor determining the distribution of the different competing suffixes is aspect: the participial suffixes *-ašč/-ušč-* and *-m-* cooccur exclusively with imperfective stems, and the same is true (with the exclusion of few perfective stems) of the converbal suffix *-a*; on the other hand, the suffixes *-n(n)-/-t-* and *-v/-(v)ši* are predominantly used with perfectives. Only *-(v)šč-* serves for both aspects.

The category of aspect is closely interlinked with taxis (relative tense). The *deepričastie* behaves in this respect rather straightforwardly: the default reading of the imperfective forms with *-a* is simultaneity with the main action, the perfective forms signal either anteriority or (most often in a position after the main verb) simultaneity. A special treatment must be provided for cases where the converb (in both aspects) describes a particular aspect of the event denoted by the main verb: strictly speaking, such iso- or tautosituational cases should not be considered as examples of temporal simultaneity, since the latter is a binary relation which requires two different events as its arguments. It may be added that event identity often finds its expression in the nondetachment of the converb (see above), though these two phenomena by no means coincide; it is

therefore not surprising that nondetached converbs allow only the “simultaneous” reading.⁶ The imperfective “past” *deepričastie* with *-v(ši)* is practically obsolete; consequently, the expression of anteriority is no longer possible when the verb in question has no perfective counterpart, cf. the example quoted by Forsyth 1970: 317:⁷

- (6) †*Znav* ≠ ?? *Znaja* *ëtogo čeloveka v molodosti, ja sklonen*
 having known/knowing this man in young-age, I inclined
doverjat' emu.
 trust him
 ‘Having known this man as a youth, I am inclined to trust him.’

Note that this deficiency of the anterior converbs is by no means a peculiarity of modern Russian. In modern Polish for example, the anterior converb in *-szy* is bound to perfective aspect; moreover, it is becoming obsolete, which means that there is only one single converb form left, viz. the one which expresses simultaneity. In other languages, the form marked for anteriority is optional and can be replaced by the “present” form if word order is iconic, i. e., if the converb precedes the main verb; this occurs, for examples, in English, see Givón 1990: 840–841 on the use of the *-ing*-form and the periphrastic variant with *having*. All these observations fit well to the picture drawn by Nedjalkov (this volume): “the existence of the latter [the meaning of precedence] usually also presupposes the existence of a converb with the fundamental meaning of simultaneity”. One wonders if this has to do with the contrast of figure and ground (in the sense of Talmy 1978 and Hopper 1979), so often observable with converbs: simultaneous states, activities or events make up a better background for the action to be set off (i. e., the main verb) than preceding ones would.

With participles, things are more complicated. The so-called “present” forms, which are all imperfective, with *-ušč/-ašč-* and *-m-* express simultaneity, the perfective “past” forms with *-(v)š-* and *-nn-/t-* anteriority. But unlike the *deepričastija*, the *pričastija* allow also an imperfective “past” form which is not infrequent. Its temporal value is however most often described inadequately. It is, for example, simply not true that “the past participle cannot be used with a predicate in the present tense. The imperfective past participle active, unlike the present participle, is tense-bound”, as Forsyth (1970: 310) puts it. Counterevidence is easy to find, e. g., among Forsyth’s own examples (1970: 310, 311). The whole story seems to be this: the imperfective past participle denotes either an action preceding that of the main verb or simultaneous with it; in the latter case, however, the main verb must be in the past tense – it may be called “tense-bound” only in this particular case – whereas in the former case no such restriction is observable. Therefore, these forms may even express an action ongoing during the

moment of the speech event or following it, as long as they are interpretable as anterior to some future event, as in:

- (7) *Učastniki, odsustvovalšie na sobranii, budut strogo nakazany.*
 'Participants absent from the meeting will be severely punished'
Učastniki, kotorye odsustvovali/otsustvujut/budut odsustvovat' ...
 'participants which were absent/are absent/will be absent ...'

As the different paraphrases show, the participle phrase is not bound to any specific absolute tense. When used in the simultaneous reading, imperfective "past" participles are interchangeable with the "present" forms with *-ušč/-ašč*. In this way, we may conclude that none of the participle forms explicitly express absolute tense, so that their behavior does not differ in any fundamental way from that of participles in other modern European languages.

As for the passive forms, the variant with *buduči* 'being', ignored by most grammarians, occurs with both aspects, but sounds rather bookish. It is, however, specialized for adverbial use and therefore provides sometimes the only possible realization of the converb function, for example:

- (8) ... *pričastija s suff. -n-, -t-, -en- počti vytesneny*
 participles with suff. -n-, -t-, -en- almost replaced
predikativnymi formami na -(v)ši, kotorye, buduči
 predicative-INSTR-PL forms-INSTR on -(v)ši, which, being
obrazovany ot perexodnyx glagolov, široko ispol'zujutsja v strad.
 formed from transitive verbs, vastly are-used in passive
konstrukcijax ...
 constructions
 '... the participles with the suffixes *n-, -t-, -en-* were almost replaced by the forms with *-(v)ši*, which, being derived from transitive verbs, are frequently used in passive constructions ... (Avanesov 1982: 410)
- cf. *... *kotorye, obrazovannye ot perexodnyx glagolov ...*
 which, formed from transitive verbs

Here, the preceding relative pronoun excludes the use of the simple participle. In other cases however, *buduči* only serves to emphasize the adverbial function and may therefore be safely omitted:

- (9) *Rassmatrivaemyj tip oborota, predstavlenyj v pamjatnikax*
 examined type clause-GEN, represented in texts
nebol'sim čisлом primerov, vychodit iz upotreblenija,
 small-INSTR number-INSTR examples-GEN, is-getting-out from use,

buduči vytesnen pridatočnym predloženiem.

being replaced subordinate-INSTR clause-INSTR

'This type of clauses, which in the texts is represented by a small number of examples, becomes obsolete, being replaced by subordinate clauses.' (Borkovskij-Kuznecov 1963: 448)

In the following sentence, the variant with *buduči* has to be used for two reasons:

- (10) *Jazykovye edinicy priobretajut tot ili inoj tip sootnesennosti*
 Linguistic units obtain this or that type correlation-GEN
s vnezjykovoj dejstvitel'nost'ju (referencial'nyj status),
 with extralinguistic-INSTR reality-INSTR (referential status),
liš' buduči upotreblennymi v konkretnom jazykovom akte.
 only being used in concrete linguistic act
 'Linguistic units obtain some type of correlation with extralinguistic reality (referential status), only when used in a concrete linguistic act.'
- cf. *?Jazykovye edinicy priobretajut ..., liš' upotreblennye v konkretnom jazykovom akte.*
- but: *Liš' upotreblennye v konkretnom akte, jazykovye edinicy priobretajut ...*

The particle *liš'* 'only' brings about the rhematization (focusing) of the participle phrase. But the main obstacle for the postposition of the participle phrase alone (without *buduči*) seems to be the conditional meaning: it is the iconic ordering of condition and consequence which here imposes itself, hence the acceptability of the inverted variant. Note that with the variant with *buduči*, this restriction ceases to exist. In all three examples, then, we have to recur to the periphrastic form which is specialized for converb function in order to obtain the intended meaning. This shows that the periphrastic form, though considered bookish or even clumsy, is in some contexts unavoidable. Moreover, we have demonstrated that a full-fledged discussion of converbs has to take account not only of the *deepričastie*, but also of the different inflected participles.

The passive forms with *-sja* are limited to the imperfective aspect and the "past" forms with *-(v)š-*; note that in the quoted example (1) the variant with the "present" reflexive participle would be ungrammatical, the appropriate form being the one with the *-m*-suffix:

- (10') *Éto byla ta samaja Frosja, *vydajuščajasja/vydavaemaja*
 This was the same Frosja *present-PART.IPF.REFL/PART.IPF.PASS
im za ego ženu.
 him-INSTR as his wife

In other cases the “present” reflexive forms do exist, cf. the examples cited by Isačenko 1975: 340:

- (11) a. *Dokumenty, xranjaščiesja v arxivax.*
documents preserve-PART.IPF.REFL. in archives
‘Documents preserved in (the) archives’
b. *Opyty proizvodjaščiesja v laboratorii.*
experiments carry-out-PART.IPF.REFL. in laboratory
‘Experiments made in a/the laboratory’

but still, these forms cannot function as true passives, since they do not allow for the adjunction of an agent in the instrumental:⁸

- (11') a. *Dokumenty, xranjaščiesja ??nami.*
documents preserve-PART.IPF.REFL. ??we-INSTR
‘Documents preserved ?by us’
b. *Opyty proizvodjaščiesja ??avtorom.*
experiments carry-out-PART.IPF.REFL. ??author-INSTR
‘Experiments made by the author’

whereas the “past” reflexive forms and the *-m*-participles combine freely with such an adjunct (*Opyty, proizvodivšiesja/proizvodimye nami*). The divergent behavior of the two reflexive series is evidently due to the fact that the forms with *-ušč/-ašč-ij*sja and passive meaning are superfluous because of the existence of the *-m*-series, whereas the forms with *-(v)šij*sja fill a gap in the aspectual system. This may be illustrated by Table 2.

Table 2. Russian participles: taxis and aspect

	Active	Passive
“present” (only imperfective)	predlagaj- <i>ušč-ij</i>	predlaga- <i>em-yj</i>
“past” imperfective	predlaga- <i>všč-ij</i>	predlaga- <i>všč-ij-sja</i>
perfective	predlož- <i>i-všč-ij</i>	predlož- <i>enn-yj</i>

The lack of precise information about the use of the imperfective “past” participles and the passive forms in *-sja* reflects probably their peripheral status: native speakers often do not feel sure about their usage. This holds even for active participles with *-ašč/-ušč-*, which during the nineteenth century are attested sometimes with perfective stems, e. g., **sdelajuščij* [perfective] *ošibki* ‘making mistakes’, or in combination with the conditional particle *by*, e. g., **dolžnosti, vyzvavšie by ...* ‘jobs, which would provoke ...’.⁹ One reason for these deviations may be the almost total absence of participles in the spoken language. But even for

written usage, it should be borne in mind that the inflected participles borrowed from Church Slavonic (i. e., all except those with *-nn-/-t-*) had to fight for their rights for a long time before being accepted as a stylistically more or less neutral feature of the written language. Lomonosov in this *Rossijskaja grammatika* considered them as part of the high style, and during the first half of the nineteenth century they were still very infrequent, so that their use had to be propagated by Pushkin in his famous "Letter to a publisher" (*Pis'mo k izdatelju*, 1836).

On the whole, the history of the different paradigms may be summarized as follows: for early Old Russian we have every reason to assume that at least three participles – those with *-uč-/-ač-*, *-v(iš)-* and *-n-/-t-* – behaved like most of the qualitative adjectives, i. e., they had full paradigms for both short and long forms. From the beginning of the written language, this system interacts with Church Slavonic influences, whence the suffixal variants *-ušč-/-ašč-* besides *-uč-/-ač-*. The same holds for the functional range of participle constructions where Church Slavonic made itself felt within predicative use (periphrastic active constructions with the auxiliary *byt'* 'be' and absolute dative constructions), giving the pattern shown in Figure 2.

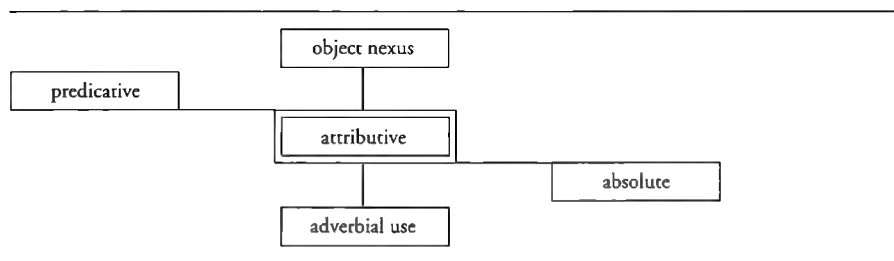


Figure 2. Syntactic functions of Old Russian participles

It should be emphasized that this pattern corresponds exactly to the one presented in König-van der Auwera (1990: 346) as the maximum of possible uses of participles. If we now compare the Old Russian situation with the accounts given above for modern Russian, it turns out that the former state is best preserved in the contemporary passive both in formal and functional respects, since there are still two series of inflected forms (the short forms, though, are no longer inflected for case) and all uses except the absolute one are maintained. On the other hand, what survives in the active are merely some isolated case forms of the former short forms which eventually gave the indeclinable *deepričastija* with *-a*, *-v/-v(iš)*.¹⁰ Aside from these paradigmatic remnants, one finds lexicalized adjectives such as *visjačij* 'suspended', *tekučij* 'current' or adverbs such as *pripevajučij* 'easily'. All remaining participial paradigms had, as mentioned above,

to be restored entirely by borrowing. On the whole, then, only the adverbial function of the vernacular active participle has survived up to our days. Again, this corresponds exactly to the hypothesis made by König and van der Auwera about the prototypical role of the adverbial function: "we could hypothesize that if a language uses participles for one or more of the functions distinguished above, the adverbial function SS will be one of them." (1990: 346)

The situation is different for Russian dialects, especially the northwestern group, where the forms with *-vši* or their derivatives combined with the auxiliary *byl'* serve to form new perfect tenses; they thus fill a gap which arose from the loss of the ancient quadripartite opposition of tenses (aorist: imperfect: perfect: pluperfect) and the maintenance of just one general past tense.¹¹ Remarkably enough, this seems to be the only case where Russian dialects differ from the standard language in the inventory of grammemes, i. e., values of a grammatical category.¹² Be this as it may, we find in these dialects a symmetry between active and passive (short forms with the auxiliary *be* used predicatively) which is absent from standard language. Note that this symmetry is all the more striking as the passive participles with *-n-* are in these dialects usually (unlike in Standard Russian) no longer inflected for number and gender.

It should be pointed out that the foreign provenance of the inflected participles in current use has left a morphological trace: the reflexive postfix *-sja*, which throughout the whole verbal paradigm alternates with its allomorph *-s'*, remains unchanged with participles. In this way, we have after a preceding vowel, for example, *spravljaju-s'* 'I manage' and after a consonant *spravljajes'-sja* 'you manage', but with the participle no change occurs, cf. *spravljajuščaja-sja* 'managing' (nominative singular feminine) in spite of the preceding vowel. On the other hand, the morphonological rule works well with the *deepričastie*, compare *spravljajas'*, *spravivšis'*. This is by no means a mere accident: unlike the imported inflected participial forms, the indeclinable adverbial participles are vernacular by origin and are therefore subject to the usual morphonological alternations.

3. Particular uses

In the following observations, we will concentrate on the *deepričastie* forms as the main representatives of the converb function. It should however be borne in mind that our observations hold also for the inflected participial forms with adverbial function. To begin with, the range of possible (contextually bound, i. e., inferred) meanings is somewhat narrower than in many Eurasian languages referred to by Nedjalkov (this volume) and may best be described as 'common European standard'; thus, one notes the absence of clear posteriority and there-

fore also consecutivity and purpose/intention.¹³ Some meanings can only be expressed with converbs, notably instrumental meaning (cf. English *by* + gerund, German *indem* + subordinate clause) and absence of some accompanying circumstance, expressed only by negation + *deepričastie* (cf. English *without* + gerund, Fr. *sans* + infinitive, German *ohne zu* + infinitive or *ohne daß* + subordinate clause); these are common Slavic characteristics. One type of use deserves special mention: together with the main verb (infinitive, participle etc.), with which they are syntactically connected, converbs may denote one single event. With postponed perfective converbs, this is quite frequent, as in example (12).

- (12) *Ona menja oskorbila, priglasiv moego sopernika.*
 she me offended, inviting-PF my rival
 'She offended me by inviting my rival.'

The same situation is here described under two different aspects: the bare description is conveyed by the converb, its evaluation by the main verb. This phenomenon has already been duly noted in the scholarly literature on this topic, cf. Boguslavskij 1977, Růžicka 1980: 175–176, Bondarko 1987: 265–267. It should be pointed out that similar cases can be found with imperfective converbs, if they only modify the main action (in this case, they are non-detached):

- (13) *Ona tancuet pritopyvaja.*
 she dances stamping her feet
 'She stamps her feet while she dances.'

A subgroup is constituted by cases in which the semantic relation between main verb and converb is one of hyperonymy-hyponymy, as in the case of *X xodit xromaja* 'X is walking with a limp'. It is interesting to note that there exists a marked colloquial construction which has the same effect: the so-called double verbs of Russian, i. e., the juxtaposition of two verbs denoting activities, having the same grammatical form (except aspect and tense, which may in certain cases differ) and merging prosodically and syntactically into one constituent, is often described as expressing one single event, cf. *X sidit molčit/stoit sognulsja/idet svistit* etc. 'X sits there and says nothing/stands, bent forward/walks (and) whistles'.¹⁴ In some cases, such double verbs constitute more or less exact colloquial equivalents of the combination "main verb plus converb", cf. *xodit xromaet* \approx *xodit xromaja*, *stoit sognulsja* \approx *stoit sognuvšis'*, *sidit molčit* \approx *sidit molčja*; it should however be added that the double verb technique conveys some extra information about the speaker's emotional involvement (surprise, indignation, satisfaction etc.), which is absent from the variant with converb. In other cases, though, the two constructions behave differently, e. g., *sidit čitaet* \neq *sidit čitaja*. On the whole, one

may state that the double verb construction is more appropriate when the unity of the given situation is emphasized, whereas the converb provides the better realization of figure-ground constellations.

One particular group of *deepričastija* contradicts just about every rule that may be stated for Russian converbs. They occur in sentences like the following:

- (14) "Energičnye ljudi", *pol'zujas'* *opredeleniem* V. Šukšina, *umeli*
 energetic people, using definition V. Šukšin's, knew
podkaraulit' *svoju minutu*.
 wait-for their minute
 '“Energetic people”, using Shukshin's definition, knew how to wait
 for their time to come.'

In this example, the implicit subject of the converb *pol'zujas'* has no controller, i. e., it is not coreferential with any overt or hidden (zero or elliptical) noun phrase in the sentence (in particular not with the subject *ljudi*); furthermore, the time interval denoted by it cannot be identical with the time of the main verb *umeli* nor overlap it, as it normally would be the case with the imperfective *deepričastie*. Such converbs are therefore in more than one regard "absolute": their implicit subject refers to the speaker, their time is the moment of the speech event, and the converb itself, derived from a verb of speaking or thinking and used in a quasi-performative way, modifies this speech act. The pragmatic function of this device is quite clear: according to Šmeleva (1984), it usually signals the adherence to some general principles of communication, i. e., to a Gricean conversation maxim or to a rule like the following: "Always indicate the source of your information/formulation" (cf. example [14]), sometimes even to the rules of logical reasoning, cf. *logičeski rassuždaja* 'logically thinking'. It may be added that unlike converbs in general, the examples in question are not restricted to formal styles, but also occur freely in the spoken language. The whole group is likely to be half-phraseological, since not every combination fulfilling the conditions described above will do the job: cf. *koroče/točnee/inače/mjagko/čestno/otkrovenno govorja, govorja meždu nami/drugimi slovami* lit. 'shorter/more precisely/differently/more mildly/honestly/frankly speaking, speaking between us/in other words', but not: **prjamo govorja* lit. 'directly speaking' or **podobno govorja* 'speaking in a similar way'.

Since similar examples, functioning in the same way, may be found in many other languages (English, other Slavic languages or German¹⁵), we limit ourselves to just one additional remark: instead of the converb, an infinitive may appear, cf. *tak skazat', kstatì skazat'* 'so to speak' (lit. 'to speak'), 'by the way'.

Sometimes it is introduced by the conditional conjunction *esli*, cf. *esli učešt'*, *čto* ... 'taking into account that ...' or *esli govorit' o* ... 'speaking about ...' (a kind of thematizer). Even when this conjunction is absent, the conditional meaning remains palpable, cf. *Poslušat' vas, on sovsem čoknutyj* lit. 'To listen [i.e., if one listens] to you, he is totally nuts'.

Incidentally, this is the only area where the domains of infinitive and converb overlap in contemporary Russian, although the two constructions are rarely interchangeable, cf. *kestat' skazat'* = *kestat' govorja* lit. 'to say by the way = by the way speaking'; *prošče skazat'* = *prošče govorja* 'to say it in a simpler way = speaking in a simpler way'; *esli učešt'*, *čto* ... = *učityvaja* [converb], *čto* ... 'if to consider = considering'; but not: *esli govorit' o* ... ≠ *govorja o* ... 'if to speak about ≠ speaking about'; *Poslušat' vas* ... ≠ **Poslušav/*slušaja vas, on sovsem čoknutyj* 'to listen to you ... ≠ *listening you, he is totally nuts'. Even *učityvaja* turns out to be more restricted than its counterpart with the infinitive. This is shown by the following authentic example, which however was judged deviant by native speakers:

- (15) *Vpervye prolita i stol' obil'naja krov', čto tem bolee*
 first-time shed too so-much abounding blood, what the-more
udivitel'no, učityvaja zatažnoj charakter trech
 amazing, considering wearisome character three-GEN
predyduščix voennykh krizisov v 1987–1988 godax ...
 preceding-GEN military-GEN crises-GEN in 1987–1988 years
 'For the first time so much blood has been shed, which is all the
 more amazing if one takes into account the wearisome character of
 the three preceding war crises of 1987–1988.' (*Pravda*, 9 December
 1990)

The problem here is that the converb occupies the place provided for the third actant of the element *tem bolee*, which is normally realized by a conjunction (*čto* or *esli*); obviously, the implicit conditional meaning of the converb is not sufficient to replace the conjunction. On the other hand, this conjunction may be followed by an infinitive:

- (15) a. ... *čto tem bolee udivitel'no, esli učešt'* ...
 which the more amazing, if consider

Still, it is possible to combine both devices within the same sentence as in example (16), where they constitute a comparative relation.

- (16) *Zajaviv: "On trus", – gorazdo bol'she opasnosti uslyšat'*
 asserting-PF: "He coward", far more risk-GEN hear-INF

vozraženie ("Čto Vy, a mne tak ne každyja"), čem esli
 objection ("What you, but me-DAT so not seems"), than if
načat' frazu slovami: "I pri vsej ego
 begin-INF sentence words-INSTR: "And with all his
trusosti ...".
 cowardice ..."

'If one asserts: "He is a coward", one risks far more hearing an
 objection ("Well, I don't think so"), than if one begins the sentence
 with the words: "And despite all his cowardice ...".'

Here, the comparative *bol'se (opasnosti)* relates *zajaviv* to *čem esli načat'*. If this
 example is acceptable (some informants consider it rather doubtful), this is due
 to the fact that the comparative construction does not require constituents of
 the same syntactic rank.

Absolute use of the type illustrated by example (14) is likely to be the point
 of departure for categorial changes. Thus, the diachronic transition from con-
 verbs to prepositions or conjunctions is well attested, cf. *načinaja ot* 'from, begin-
 ning with', *končaja* 'up to', *uključaja* 'including', *blagodarja* 'thanks to', *spustja* 'after',
nesmotrja 'despite' or *xotja* 'although'. The first four of these expressions may
 also function as regular converbs. Other cases are simply ignored by the existing
 dictionaries. A good candidate for an example functioning in both ways seems
 to be *ne doxodja (do)* 'before (reaching), close to'. In the following sentence, it is
 used as a regular converb:

- (17) *Kolonna dvinulas'. Ne doxodja do triumfal'noj ploščadi, opjat'*
 column moved. Not reaching to Triumph Square, again
ostanovilis'
 stopped-pl
 'The column moved. Before reaching the Triumph Square, they
 stopped again.'

In our next example, however, there is no main verb nor any subject left to
 which the converb could be related, so that the latter has become an ordinary
 preposition:

- (18) B *Xorošo. A škola rjadom? Ili net.*
 fine and school close-by or not
 'Fine. Is the school close by or not?'
 A *Škola prjamo na Novom Arbate ... Dve minuty.*
 school right on Novyi Arbat two minutes
 'The school is right on the Novyi Arbat ... Two minutes.' [...]

- A *U konservnogo magazina tam, naprotiv dietičeskogo,*
 at grocery store there in-front-of diet-shop
ne doxodja dietičeskogo,
 not reaching diet-shop
 ‘At the grocery there, in front of the diet shop, just before the
 diet shop.’

Note the colloquial omission of the second *do*, which is possible only when this expression is used as preposition. Dictionaries usually do not take notice of this use, although it seems to have existed for centuries (in Bulaxovskij [1958: 400] one finds an example which goes back to 1687).¹⁶

4. A typological paradox

4.1. Embedding in nonfinite predicates

So far we have been discussing features of Russian converbs which do not differ from those in other European languages in any substantial way. In what follows, we shall concentrate on certain peculiarities of Russian which at first look rather contradictory. To begin with, Russian converbs are subject to fewer syntactic and semantic restrictions and consequently are used more frequently than their counterparts in other Slavic languages. This somewhat global claim, which has already been substantiated by Růžička (1978), may be illustrated by the following observations: (a) Russian *deepričastija* can be freely coordinated with other types of adverbials; (b) they can be freely combined with all types of nonfinite predication, for instance infinitives, other converbs, participles and even verbal nouns; (c) their implicit subject may be controlled by nonovert noun phrases or even whole sentences; (d) the controller need not be identical with the grammatical subject, but may for example be an experiencer or agent of the passive, provided that it belongs to the theme. Since evidence for all this abounds in the literature on our topic, we shall limit ourselves to the discussion of some selected points.

Converbs combined with infinitives are not exceptional, but occur, for instance, in Polish as well (Weiss 1977: 279–284); in both languages, the deleted subject of the infinitive may be coreferential with some overt noun phrase in the same sentence, even if the latter is in an oblique case (for Russian, see Růžička 1982: 394), or denotes some general variable (“every *X*”). What is however not acceptable in Polish (nor Czech, Serbo-Croat, etc.) are converbs embedded in nominalizations:

- (19) *Ot etiketa slušanija ne gljadja v glaza, vozmožno,*
 From rule listening-GEN not looking into eyes, perhaps,

utverdilas' i vtoraja etiketnaja osobennost' – govorit'
 established also second etiquette particularity: speak-INF
ne žestikuliruja.
 not gesticulating
 'Out of the rule of conduct that prescribes not to look into the
 other's eyes while listening there has perhaps also developed a sec-
 ond particular rule: not to gesticulate while speaking.'

Here we find both combinations on a par: converb plus verbal noun (*slušanja*) and converb plus infinitive (*govorit'*). Note that there is no other way left of modifying the verbal noun with the intended meaning. The same holds for the following example:

- (20) *Raskladuška – éto predmet dlja otдыхa (sna) ležja.*
 camp-bed this-is object for rest (sleep) lying
 'A camp-bed is an object for (literally) rest lying.'

In Polish, instead of the converb *leżąc* one would have to use here the derived adverb *na leżąc*. The Russian use, which by the way requires nondetachment of the converb, has met with the approval of normative work, see Ickovič (1982: 150) or Švedova (1980: 183).

The same is true of the embedding of one converb into another. This use may be illustrated by the following example:

- (21) *Obščij etiket rekomenduet, razgovarivaja s čelovekom*
 General etiquette recommends, talking with person
sidja, sidet' na polovine stula, nogi čut' v storonu.
 sitting sit-INF on half seat-GEN, legs slightly in side
 'General etiquette recommends, that, when speaking in a seating
 position, one should sit on the front half of the seat, with one's legs
 a little bit to the side.'

As is pointed out by Ickovič (1982: 148–149) and Švedova (1980 II: 183), such cases may be ambiguous between the embedded and the enumerative, i. e., coordinated reading. In the example just cited, coordination is excluded because of the nondetached second converb *sidja*. Other factors which speak in favor of the noncoordinated interpretation are certain temporal relations between the two converbs or the location of the second converb in the middle of the first converb clause. And finally, recursive embedding of converbs is compatible with the evaluative meaning discussed earlier (see example [12]):

- (22) *Daže projda školu gegelevskoj logiki,*
 even go-through-PART.PF school-ACC Hegelias-GEN logic-GEN

*prorabotav na trenazhere otčuždenija Absolutnogo
work-PART-PF on training machine alienation-GEN absolute-GEN
ducha, Marksu prišlos' zatatit' gigantskie
spirit-GEN Marx-DAT was-necessary spread-INF enormous
usilija, ...
efforts ...*

'Even having gone through the school of Hegelian logic, having worked on the training machine of the alienation of the Absolute Spirit, Marx had to spend an enormous amount of energy ...'

Here, the second converb *prorabotav* explains what is meant by the first converb clause (*projdja* ...).¹⁷ Again, other Slavic languages do not allow for such embedding; on the other hand, coordination of converbs occurs freely.

Finally, Russian converbs may be embedded into attributive participle clauses. When the latter are in the nominative case, this construction causes no objections, as in:

- (23) *Fašistskie vojska, otstupavšie, neja tjaželye
fascist armies, retreating (PART.) suffering (CONV) serious
poteri ...
casualties ...*
'While retreating, the fascist armies, suffering serious casualties ...'
[Švedova 1980 II: 183]

With the head noun in an oblique case, however, the resulting structure is ambiguous, since the converb can also be related to the subject; this is why Ickovič (1982: 147) considers them undesirable. In many cases, though, contextual factors eliminate this ambiguity:

- (24) *Lopatin; uvidel Velixova, stojavšego, s nepokrytoj
Lopatin saw Velixov standing (PART.ACC.) with not-covered
golovoj, derža>>i furažku v ruke.
head, holding (CONV) cap in hand
'Lopatin_i saw Velixov_j, standing bare-headed and holding_{j>>i} his
peaked cap in his hand.'*

In this case as well, other Slavic languages avoid such embeddings.

On the whole, the reader may have noticed that examples (19) to (24) represent Russian syntactic peculiarities which are not only unacceptable in Slavic, but not typical of common European standard either; this is shown by their partly deviant literal English (or, even worse, German) translations; in French, the *gérondif* may sometimes be more helpful than the participle. In this respect, Russian may thus be called more liberal than other languages.

4.2. Control properties

The same probably holds for the question of what nouns may control the implicit subject of the converb. The problem has often been discussed from a normative point of view. The main result of these battles seems to be that, notwithstanding the efforts of grammarians to ban overt controllers other than subjects, such controllers have been in constant use throughout the last 150 years and, moreover, can be found not only in the newspapers, but also in the works of the most prestigious writers. It remains to be explained why the grammatical subject enjoys such an exclusive esteem in normative accounts, but a discussion of this matter would take us too far afield.

In descriptive work, different approaches have been taken: the acceptability or inacceptability of nonsubjects as controllers has been discussed in terms of detachment (Rappaport 1980), deep case and thematicity (Yokoyama 1980, 1983) or more complex mechanisms including Yokoyama's criteria (Růžicka 1982). This discussion has shown that although not "everything goes" in this respect, Russian shows a remarkable nonchalance in allowing noncanonical controllers, i.e., nonsubjects, provided they have thematic status. This concerns especially two groups. First, both overt and nonovert (zero or elliptical) experiencers may be found, cf. the dative *Marksu* in example (22) versus the implicit subject of the infinitive *uslyšat'* in (16). Note that the noun phrase in the oblique case may be the only possible controller as in example (22) or overrule an existing subject, cf. (25) below. Examples of the former type may be found also in Polish, where their acceptability provokes similar controversies as in Russian (see Weiss 1977: 278–282; Yokoyama (1983) quotes similar examples from Serbo-Croat and Czech (Moravian dialect) and even from French and English. Additional data on experiencers as controllers of the French *gérondif* may be found in Haspelmath (this volume).

Sentences where an existing overt subject does not control the converb are however more restricted in all these languages. A typical case is that represented by Yokoyama's example:

- (25) *Slušaja; ego, u menja; goreli glaza i ščeki.*
 listening him, at me burned eyes and cheeks
 '(On) listening to him, my eyes and cheeks were burning.'

The subject *glaza i ščeki* constitutes here a part of the real controller (*menja*) of the converb, which according to Yokoyama significantly facilitates the use of such noncanonical controllers. It may be remembered that part-whole relationships are also one of the main factors that allow for absolute participial constructions (König–van der Auwera 1990: 340) with overt subjects (see below).

So far, we have not found any significant difference in the controlling properties of Russian converbs compared with other languages. The situation changes if we consider converbs that are controlled by the agent (overt or absent) in passive sentences (Ickovič 1982: 135–137), compare:

- (26) ... *avtomášiny ili prinadležat transportnoj organizácii,*
cars either belong transport organization-DAT,
ili nanimajutsja eju, ne vmešivaja; v èto delo klienta.
or are-rented it-INSTR, not involving in this matter client-ACC
'The cars either belong to the transport firm or are rented by it,
and the firm does not involve the clients in this matter.'

It would be difficult to find similar examples in other Slavic languages. On the other hand, the converb in Russian may also be controlled by the grammatical subject of the passive sentence, compare:

- (27) *Okončiv; v 1940 godu desjatiletku, ja;*
finish-PART.PF.ACC in 1940 year ten-years-school I
osen'ju byl prizvan v Armiju.
autumn-INSTR was drafted into Army
'Having finished ten years of school in 1940, in autumn I was
drafted into the Army.'

Consequently, ambiguous converbs which are either controlled by the agentive adjunct or the subject of the passive finite verb can in principle occur. To be sure, there is nothing surprising about the fact that adverbials in passive sentences may be ambiguous in this way, cf. the two readings of the adverbial in the English passive sentence *John was willingly sacrificed by the tribe* in contrast to the unambiguous active counterpart *The tribe willingly sacrificed John*. With converbs however, this ambiguity raises the wrath of grammarians. For example, the potential conflict between two possible antecedents of the converbal subject drives Ickovič to condemn both variants (control by the agent or the subject), which according to him violate either a syntactic or semantic restriction of converbalization (1982: 138).¹⁸ This somewhat amazing double ban is, however, irrelevant for our purpose; it suffices to state that converb controllers of both types occur quite often in actual usage, which distinguishes Russian from other Slavic languages and perhaps also from the common European standard, including English, where only subject control seems to work (cf. Haspelmath, this volume); it should, however, be noted that the French *gérondif* allows for the same conflict of controllers as Russian, cf. Haspelmath, section 5.1).

Let us add two other cases of noncanonical controllers, both of them of rather marginal acceptability. The first is constituted by converbs related to main

verbs with no overt actants at all. As is generally known, the so-called weather predicates fit this description best:

- (28) **Jarko blesnuv, sil'no zagremelo.*
 brightly flashing, loudly thundered
 'It hundered, there having been a bright flash of lightning.'
- (29) *?Zavylo, uxodja... i sejčas že ... zaxclopali vystrely.*
 howled, moving-away, and right-now clapped shots
 'It began to howl, moving away and right now shots clapped.' (A. N. Tolstoj, quoted in Rappaport 1980: 280)
- (30) *L'et ves' den' ne perestavaja (ni na minutu).*
 is-raining whole day not stopping (not for minute)
 'It's been raining the whole day without stopping (for a minute).'

As can be seen from our series of examples, there obviously exist a whole scale of different acceptability ratings. The first example is simply ungrammatical, probably because we cannot name one single force responsible for thunder and lightning. The second example still sounds strange, but is attested. Finally, example (30) is fully acceptable, which is most probably due to the meaning of the converb *ne perestavaja* denoting a high intensity of the process expressed by the main verb; it may thus be considered a value of the lexical function *Magn* (cf. Mel'čuk 1974 b: 89–90). It is not surprising that the same meaning is also responsible for the acceptability of many double verbs (e.g., *b'et ne žaleet* (lit.) 'beats has no pity', or *učitsja ne lenitsja* 'learns is not lazy') that otherwise do not satisfy the conditions to which this construction is subject.

The fact that some converbs do occur with weather predicates is a good argument in favor of the hypothesis that the latter take a zero actant (for more evidence, see Mel'čuk 1974 a: 358 and Wierzbicka 1988: 223–234). The acceptability of such examples increases when the possible "agent" (wind, rain, water, etc.) is realized by a noun phrase in the instrumental in the same sentence or at least can be added. Similar examples are attested for Polish (Weiss 1977: 279–280). The reader may test for him- or herself whether English or Romance languages allow for similar combinations (cf. *?It was raining, forcing us to go back*).

The other extreme consists of converbs controlled by whole sentences. A particularly striking example is cited by Růžicka (1982: 408), where a dependent question clause functions as subject controlling a converb clause:

- (31) *bol'se vsego pugaló ego, i mysl'ju ne davaja*
 most of-all frightened him, even mind-INSTR not giving
podstupit'sja i razrešit', ugadat' xot' nemnogo napered –
 approach-INF and solve, guess but slightly in-advance –

čto budet s mater'ju?

what will-be with mother?

'What frightens him the most was a problem, which did not even allow him to mentally approach and solve it, to surmise even slightly in advance – what would become of his mother?' (V. Rasputin, cited in Růžicka 1982: 408)

Again, it is not easy to find similar examples in other languages (cf. Růžicka 1978: 235).

It may be added that the remarkable freedom of nonsubjects as controllers of converbs can be related to similar facts in the domain of the reflexive pronouns: as is shown by Padučeva (1985: 186–209), there are many situations where the reflexive pronoun in Russian is not controlled by the grammatical subject, and many others, where instead of the expected reflexive we find a personal pronoun. Some of these cases coincide with the ones where a converb can be controlled by a nonsubject: for example, the reflexive may be controlled by the head noun of a participle, a verbal noun or the agent in the passive construction. Besides this, we find cases where the implicit subject of a converb, which is not coreferential with the main subject, controls the reflexive, cf. Padučeva (1985: 191):

- (32) *Ivanu; veleli javit'sja; v upravlenie, imeja; pri sebe;*
 Ivan-DAT ordered-PL appear in direction having with him
pasport.
 passport
 'Ivan was ordered to come to the direction office having his passport with him.'

(Note that the converb itself is controlled by the implicit subject of the infinitive.)

Similar evidence can also be found with infinitive constructions introduced by *čto-by* 'in order to', the implicit subject of which may be controlled by the agent of a main verb in the passive. Furthermore, subject control is not obligatory for omitted subject personal pronouns either. All this demonstrates clearly that the grammatical subject plays a less prominent role in Russian syntax than for example in English or German. This impression is corroborated by the abundance of "impersonal" sentences (i. e., sentences without overt subjects) in Russian; in this respect, Russian surpasses other Slavic languages as well, e. g., Czech or Serbo-Croat. In general, one can conclude that Russian is less subject-prominent (in the sense of the typology propagated by Li and Thompson [1976]) and more topic-prominent than other Slavic languages, not to speak of German, English

or French.¹⁹ This characteristic becomes still more evident when we examine colloquial Russian: here, the partition into theme and rheme prevails and may even completely destroy the syntactic organization of the sentence, including the nexus between subject and predicate. Again, a thorough discussion of these facts would take us too far away from our main topic.

So far we can summarize our observations in the following way: Russian usage turns out to be more “liberal” than other languages in combining converbs with nonfinite predicates (other converbs, participles, nominalizations) and at least as “liberal” in allowing for nonsubjects as controllers of the converb. To this we may add the high frequency of converb constructions in elaborated speech. Since we know of no other comparative count of converbs than the one given in Nedjalkov (this volume), where Russian is the only Slavic language represented, we must limit ourselves to the bare estimate that the frequency of converbs in Russian is much higher than in all other Slavic languages and also in English or French, not to speak of German. Especial attention deserves the fact that one sentence often contains two or more converbs which are related to the same main verb independently from each other (a case not to be confused with the recursive embeddings in examples [21] and [22]):

- (33) *Tol'ko razdeljaja etu gipotezu, možno ser'ezno dumat' o
Only adopting this hypothesis can-one seriously think about
sozdanii biblioteki universal'nyx smyslov,
creation library-GEN universal-GEN meanings-GEN,
razumeetsja, raspolagaja dlja etogo special'nym semantičeskim jazykom.
of course, having for this special semantic language
'Only by adopting this hypothesis can one seriously consider the
creation of a library of universal meanings, of course, having at
one's disposal a special semantic language for this aim.'*

4.3. The other side of the coin: The ban on absolute constructions

Considering this general preference for converb constructions, it seems all the more striking then that Russian is in two respects far more restricted than English or the Romance languages: it allows no absolute constructions, i. e., converbs with overt subjects of their own, and it does not admit syndetic linking, i. e., converbs introduced by conjunctions. Let us briefly illustrate the first point. An example such as *The matter was examined by some minor official, his boss being busy*, which is perfect in English (cf. similar examples in Givón 1990: 842–843), could never be rendered literally in Russian since it contains a converb with an own subject (*boss*). What does exist are sentences of the type discussed above where the implicit subject of the converb must be the speaker, cf. example (14), but

such converbs, besides all their other restrictions and their more or less phraseologized character, do not contain an overt subject of their own and thus cannot be considered as examples of absolute deranking (i.e., “different-subject marking”). This is additional support for the general claim made by König and van der Auwera (1990: 339): “if a language has absolute deranking, it also has conditional deranking (= same-subject marking)”.

Still, one should note certain possible exceptions to this rule: instead of the zero subject, converbs may in Russian be accompanied by the pronouns *sam*, *ves'*, *každyj*, *oba*, *odin*, *pervyj*, *kto* ‘himself’, ‘whole’, ‘each’, ‘both’, ‘the first’, ‘some (of them)’ respectively. In a case like

- (34) *Matvej molčal, ožidaja rassprosov, sam*
 Matvej was-silent expect-CONV interrogations himself
dumaja — o čem sprosit'.
 wonder-CONV about what ask-INF
 ‘Matvej was silent, expecting interrogations, himself wondering what to ask.’²⁰

the pronoun *sam* does not function as an autonomous subject since we have also *Matvej sam dumal*, where the pronoun is an adjunct of the real subject *Matvej*. On the contrary, in the following sentence the pronouns *pervyj* and *vtoroj* must be considered the real subjects:

- (35) *Sidorov i Xaburgaev stojali molča, pervyj opustiv*
 Sidorov and Xaburgaev stood being-silent, first bowing
golovu, vtorej slegka sognuvšis'.
 head, second slightly bent
 ‘Sidorov and Xaburgaev stood silent, the first bowing his head, the second bent slightly forward.’

Note that here the elliptical reading (*the first Sidorov) is totally excluded. Similar cases may be found with *odni*, *drugie* and *kto*, see Weiss (1990: 71). This phenomenon is however not bound to pronominal elements, but has a transparent semantic motivation: the reference of the main subject denoting some set of elements is split up by exhaustive enumeration, each element making up a separate subject.²¹ In this situation, even full nouns including proper names will do, as in:

- (35') *Druž'ja sideli molča, mužčiny opustiv ..., ženščiny ... sognuvšis'.*
 ‘The friends stood there silent, the men bowing ..., the women ... bent forward.’
- (35'') *Druž'ja sideli molča, Petja opustiv ..., Kolja ... sognuvšis'.*
 ‘The friends stood there silent, Petja bowing ..., Kolja ... bent forward.’

This is the only case where Russian may be suspected to allow for absolute use of converbs. Again, this would fit well to the general constraint mentioned above, according to which the absolute use tends to express part-whole relationships. Yet, the seeming exception can be explained away: examples like (35) are felt to be elliptical and can easily be reduced to structures with repetition of the main predicate, for example:

- (35^m) *Druž'ja stojali molča: mužčiny stojali, opustiv golovu, (a) ženščiny stojali, slegka sognuvšis'.*

Of course, the original version is preferable for stylistic reasons. In favor of its elliptical reading we may adduce its intonational contour: not only are the converb clauses detached, but there is an additional break after the new themes/subjects *mužčiny* and *ženščiny*. If we accept this explanation for examples such as (35), we may conclude that Russian admits no overt subjects whatsoever in the converb clause.

In the light of the general tolerance for converbs in Russian, this constraint seems quite remarkable. It becomes all the more so if we take into account that other languages in the same area do have absolute converbs: in Lithuanian, for example, they take the dative case, and in Finnish there are absolute constructions with the head noun in the genitive. Moreover, absolute constructions are very common in historically more remote stages of Russian itself, where both inflected participles (short and long forms) in the dative and the new forms without inflection (i. e., the *deepričastija*) occurred in this function up to the end of the eighteenth century. As for the dative absolute, the opinion prevails nowadays that its origin is due to Church Slavonic influence,²² but during the history of Old Russian it enjoyed a remarkable expansion, becoming eventually a special, stylistically marked type of predication. This is revealed by the fact that in Old Russian many "licences" are admissible which in Church Slavonic texts almost never occur (Borkovskij 1978: 417–432): (a) they can constitute independent sentences, i. e., function as main predicates (in later texts, more than half of all absolute datives function in this way); (b) about 25 percent of all datives absolute are by no means absolute, since their overt subject is coreferential with some other noun phrase in the remaining sentence; (c) the absolute dative may be introduced by conjunctions, much in the same way as usual Old Russian *deepričastija* (see below), including for instance the paratactic *i* 'and'. In this way, the participle in the dative is less and less reminiscent of the old absolute converb; during the sixteenth and seventeenth centuries, it may be said to constitute a stylistic variant of dependent or independent clauses. This fading away of its primary syntactic *raison d'être* may have been one of the reasons that led to its eventual extinction at the end of the eighteenth century, about which an author

as early as Lomonosov complained in his *Rossijskaja grammatika* (1757); its sporadic appearance in texts from the beginning of the nineteenth century has to be considered archaic.

As for (b), it should be borne in mind that the dative absolute never was the exact counterpart of the absolute ablative in Latin or the genitive absolute in Greek. The following example from the *Laurent'evskaja letopis'* illustrates that it could even be used when we would expect a *participium coniunctum*:

- (36) *M'sislavu že priběgšju Novgorodu rekoša jemu*
 Mstislav-DAT arrived-DAT Novgorod-DAT told him-DAT
Novgorodcy.
 Novgorodians
 'When Mstislav arrived at Novgorod, he was told by the Novgorodians.'

Speaking in terms of Latin syntax, the anaphoric pronoun *jemu* seems superfluous, since the dative of the head noun and its participial attribute could as well be governed by the main verb; in other words: in Latin or Greek there would be no need for an absolute construction, the appropriate solution being a *participium coniunctum*.

The decay of the old construction manifests itself not only in its functional development, but also in its formal evolution. Sometimes, only the head noun of the construction is in the dative, whereas the participle takes the nominative, thus becoming similar to a *deepričastie*, compare:

- (37) *Mraku že zelenu ot zapada prixodja*
 dusk-DAT green-DAT from West coming (NOM or indeclinable)
 'When the green dusk was coming from the West.'

The same peculiar blending of forms with and without inflection characterizes the Lithuanian dative absolute (Nedjalkov, this volume); moreover, it is found in dialects spoken in the central and western area of Belorussia (Borkovskij–Kuznecov 1963: 450). Traces of this use are also attested for North Russian dialects, cf. *zakativšis'* (*deepričastie*) *solncu* (dative) 'the sun having set', and those of the Brjansk area (Borkovskij–Kuznecov 1963: 448), but one gets the impression that these are entirely lexicalized.

On the other hand, we find in Old Russian also cases where the absolute construction consists of a noun phrase in the nominative and the indeclinable *deepričastie*, as in:

- (38) *Všedši tuča, i ide dožd' vo vsju noč.*
 having-entered-NOM cloud-NOM and went rain in whole night
 'There came a cloud, and it rained the whole night.'

Unlike the dative absolute, limited to literary genres written in high style, this type also occurs in official and business language, which suggests that it was vernacular.

From all this we may conclude that the morphological marking of the absolute use in Old Russian is not a very salient feature: the dative case is neither the only marker of absoluteness, nor does it serve exclusively for this purpose (cf. example [36]); moreover, it is stylistically marked as bookish or lofty.

There remains a fourth case to be discussed: the converb has its own overt subject in the nominative which is coreferential with a noun phrase in the remaining sentence or even identical with the main subject. The latter case is realized in the following example from the Petrine period – from the *gistorija o rossijskom matrose Vasilii Koriotskom i o prekrasnoj korolevne Iraklii florenskoj zemli* [The story of the Russian sailor Vasilij Koriotskij and the beautiful Queen Iraklija of Florence]:

- (39) *Vyslušav že otec ego i dade emu blagoslovenie ...*
 having-listened father him-ACC and gave him-DAT blessing
 'After listening to him, his father gave him the blessing.'

Here, it is the placement of the subject which differs from the modern standard: instead of being in the main clause as in contemporary Russian or English, it occurs in the converb clause. Of course, converbs without overt subjects were not excluded by this, as is shown already by the continuation of the sentence quoted above: ... *blagoslovenie, otpustja ot sebja*. '... sending him away'. Therefore, one should, as Yokoyama (1980) argues convincingly, treat the placement of the subject as a separate criterion, independent of its absolute use. What happened in the second half of the eighteenth century was then a double change: the converb ceased to take an overt subject, and consequently it could no longer be used in absolute constructions. Moreover, the loss of the autonomous subject probably caused control by the main subject to become crucial.

This cluster of innovations can be illustrated by Lomonosov's examples from his *Rossijskaja grammatika*, section 532:

- (40) a. (recommended)
Iduči v školu, vstretilsja ja s prijatelem.
 going in school, met I with friend
 b. (rejected)
Iduči ja v školu, vstretilsja so mnoju prijatel'.
 going I in school, met with me friend
 'On the way to school, a friend met me.'

As can be seen, the old standard allowing for converbs with autonomous subjects which were not identical with the main subject was now rejected.²³ Interest-

ingly enough, Lomonosov still admits overt converbal subjects that are coreferential with the (elliptical) main subject:

- (41) *Napisav ja gramotku, posylaju za more*
 having-written I letter, send-1.PERS.SG. overseas.
 'After writing a letter, I send it overseas.'

On the other hand, true absolute use is no longer accepted:

- (42) (rejected)
Napisav ja gramotku, on priexal s morja.
 having-written I letter, he arrived from sea
 'When I had written a letter, he arrived from the sea-side.'

These examples are repeated by later grammarians, e.g., by Kurganov (1769 [1978]) and by Barsov in his unpublished *Rossijskaja grammatika* (1783–1788 [1981]).²⁴ Lomonosov's recommendations may well reflect the actual chronology of the changes described. Indeed, overt absolute subjects have been the first to disappear from real texts: the latest examples I have found so far are attested in Kantemir (Bulaxovskij 1958: 400), who died in 1744, Kurganov (but cf. note 24) and Xemnicher (died 1784). Obviously, the beginning French influence was not strong enough to save this construction denounced by the purist Lomonosov as foreign (cf. his formula *po svojstvu čužix jazykov* 'as is characteristic of foreign languages') and incompatible with correct Russian usage;²⁵ this ban was repeated word by word in Barsov's grammar (Barsov [1981]: 223–224).

The second candidate bound to disappear was the overt subject coreferential with the main subject, cf. example (41). Similar examples are still accepted by Barsov and may be found in usage up to the end of the eighteenth century; those that occurred later (e.g., in Pushkin's work) served as intentional archaisms. And finally, implicit converb subjects which are coreferential with noun phrases other than the main subject were attacked by normative work. It is revealing that Lomonosov did not consider this case. In Barsov's grammar however, it is acceptable usage, as the following example illustrates (Barsov [1981]: 223):

- (43) *Ljubja tebjja mně; èto xdelat' možno.*
 loving you-ACC me-DAT this do possible
 'Since I love you, I can do this.'

As has been shown in section 4.2, later attacks on this type of use by language codifiers did not succeed: nonsubjects as controllers of the converb continue to be quite widespread even today.

To sum up, in Old Russian, four types of converb constructions were possible, viz. converbs with and without overt subjects which in turn could or could

not be controlled by (coreferential with) the main subject. From these four types, only one (no overt subject, subject-controlled) remains intact, while two have died out without leaving any trace (overt subjects) and one has survived, but is denounced by prescriptive grammarians (nonsubject controller).

Note that the various changes mentioned can hardly be traced back to the same reason. The loss of autonomous subjects coreferential with the main subject is, as Yokoyama (1980) points out, probably due to the simultaneous introduction of obligatory pronominal subjects in the main clause:²⁶ this change made the overt subject in the converb clause simply redundant. The subject control constraint for converbs without overt subjects is likely to be explained by foreign influence, especially the contact with the already codified French norm. On the other hand, the loss of absolute overt subjects cannot be explained in this way, since French does allow for absolute converbs; the reason which effected this change must have been the same as the one responsible for the simultaneous loss of absolute dative constructions. We will return to this point below.

4.4. The ban on syndetic linking

The second constraint peculiar for modern Russian converbs concerns the use of introductory conjunctions. Indeed, examples such as English *when asked if ... or before coming*, German *obwohl gefragt* 'though asked' or French *bien que sachant* 'though knowing' cannot be translated literally into Russian, since in modern Russian it is not possible to link adverbial participles with main clauses by conjunctions (on the other hand, conjunctions such as *i* 'and', *libo* 'or' and *no* 'but' may of course link two coordinated converbs).²⁷ Despite what can be found in the literature on this topic (including my own previous work), there seems to be no exception to this rule. For example, in Weiss (1990: 67) comparative conjunctions are said to occur freely in converb clauses, as in:

- (44) *U nas net pričin govorit' o socializme kak by*
 at us there-not reasons speak about socialism as if
stesnjajas', vpolgolosa.
 being-embarrassed, half-voiced
 'We have got no reason to speak about socialism as if we were
 embarrassed, sotto voce.' (Gorbachev)

As well as *kak by*, (*kak*) *budto*, *točno* or *slovno* can also be used in this way. Since comparative meaning is never expressed implicitly, this exception would be comprehensible. But the point is that contrary to what the dictionaries claim, none of the elements mentioned functions as a true conjunction: they behave in the

same way as in an example such as *On u nas kak by direktor* 'He is our director, so to speak', namely like a simple adverb.

There remains one less clear case where a conjunction can introduce a converb, i. e., *xotja* (i/by) 'though', 'even if':

- (45) *Uspexami russkoj literatury tože postojanno*
 successes-INSTR Russian-GEN literature-GEN also always
interesovalsja, xotja niskol'ko ne terjaja svoego
 was-interested, though not-in-the-least not losing his
dostoinstva.
 dignity
 'He was also interested in the success of Russian literature, though not in the least losing his dignity.' (Dostoevsky, quoted in Bondarko 1987: 271)
- (46) *Vot ottogo moj golos gluxovat, I vse ž on gromče*
 this-is therefore my voice a-bit-flat and yet – it louder
šelesta stranic, xotja by i stremitel'nej
 rustling-GEN pages-GEN even-if would even vehemently-COMP
stareja.
 age-CONV
 'That's why my voice is a bit flat
 And yet, it is louder than the rustling of pages, even if is aging more vehemently.' (J. Brodsky, *Zimnjaja pošta* [Winter mail])

Yet, this is by no means the usual way of applying a conjunction, but what may be classified as its secondary use, in the sense of Prijatkina's (1974) term *vtoričnyj sojuz* 'secondary conjunction.' What she means by this is the following: the conjunction in question is so to say implanted in an already existing syntactic relation, e. g., *Pomošč prišla pozdno* 'Help arrived too late' → *Pomošč prišla, xotja pozdno* 'Help arrived, but too late.' In the same way, in examples (44) and (45) a "parasitic" new relation is added to the already existing relation between main predicate and converb by introducing *xotja*: *Uspexami ... on interesovalsja, ne terjaja ...* → *Uspexami ... on interesovalsja, xotja i niskol'ko ne terjaja ...* 'He was interested in the success, not losing ...'.

It may be noted that the resulting structure can be interpreted as elliptical, cf. *Pomošč prišla, xotja prišla pozdno* 'Help arrived, but it arrived too late' and *Uspexami ... on interesovalsja, xotja i interesovalsja imi, niskol'ko ne terjaja ...* 'He was interested in the success, although he was interested in it, not losing by any means ...'. From this it follows that what is really introduced by the conjunction is not the converb, but a second occurrence of the main verb. If one rejects the

elliptical interpretation, one has to admit that we are no longer dealing with a conjunction, but rather with a kind of adverb. Be this as it may, examples like (45) and (46) can be shown not to be exceptions to the ban on syndetic linking.

As is shown by Prijatkina (1974), not many conjunctions allow a “secondary” use: in addition to the concessive *xotja* (i) and *no* ‘but’, *i*, *da* ‘and’ *esli* (i) ‘even if’ seem to be most frequent ones.²⁸ These other conjunctions do however not occur in converb clauses. Again, it may be argued that the concessive meaning is seldom expressed implicitly: the disappointment of expectation inherent to it needs to be signaled by special means. But then, this aim can also be realized by adding to the main clause *use že*, *use-taki*, *odnako*, *tem ne menee* or *v to že vremena* ‘however’, ‘still’, ‘nonetheless’, ‘at the same time’, if the converb precedes it.²⁹ This may explain why no other concessive conjunctions occur in converb clauses, cf. **nesmotrja na to što soxraniv/*pri tom što soxraniv* ‘though maintaining’, etc.; not even simple *xotja* can be found in this position.³⁰

Other supposed counterevidence to the syndetic linking constraint can easily be explained away, compare:

- (47) ... *i utixaju* *ne prežde, kak istoščiv* *ves' zapas*
 and quiet-down not before having-exhausted whole stock
 oskorbitel'nyx primečanij.
 offensive remarks
 ‘... and I quiet down only when I have exhausted the whole stock
 of offensive remarks.’ (Pushkin, quoted in Růžička 1978: 236)

It is true that *prežde kak* normally functions as a conjunction, but note the inadmissibility of the following variant:

- (47') ... *i utixaju*, **prežde kak istoščiv* ...
 and quiet down before having exhausted

So, it is only the negative *ne prežde kak* that works here. The reason seems clear: *ne prežde kak* is synonymous with *tol'ko* ‘only’, thus ceasing to be a conjunction and becoming an adverb, which means that it is not subject to our constraint.³¹

The ban on syndetic linking is all the more striking, as in Old Russian nearly all conjunctions could occur in converb clauses, including those considered to be the classical representatives of paratactic linking such as ‘and’ or ‘but’. Examples in which a paratactic conjunction links a preposed converb with the main clause have already been adduced above, compare examples (38) and (39). This use is probably not to be explained in terms of converbal syntax, since the same conjunctions *i*, *da* and *a* could also occur between a preposed subordinated clause, introduced by conditional or temporal conjunctions such as *jako*, *egda*, *kak*, *koli* ‘when’, ‘if’, and the main clause (Borkovskij–Kuznecov 1963: 484–494,

Korotaeva 1964: 7–34). To call them paratactic therefore seems to be rather misleading; what we are dealing with are rather correlates comparable to *to* or *tak* in contemporary language. But *i*, *a* or *da* could also introduce the converb instead of the main clause; this use is already attested in early birch bark texts. In both positions, i.e., before and after the converb clause, their appearance must be interpreted as a symptom of the rather loose ties connecting converb and main verb in Old Russian.

Whereas the use of paratactic linking is Common Slavic (see below), the appearance of such hypotactic conjunctions as *kak* ‘how, when’, *ponežę* ‘because’ or even *čto* ‘that’ in converb clauses must have been an independent innovation which arose in East Slavic under the influence of hypotactic sentences. The following example from *Putešestvie po svjatoj zemle d’jakona Gogary v 1634* [Journey around the holy Earth by the deacon Gogara in 1634] presents both “hypotactic” and “paratactic” conjunctions:

- (48) *I kak otpěv*” *obědnju,* *i razgavlivajutsja*
 And when having-sung morning mass, and end-PL-fast
syrom” *i jaicy.*
 cheese-INSTR and eggs-INSTR
 ‘And after singing the morning mass, they end the fast by eating
 cheese and eggs.’ (quoted from Borkovskij 1973: 136)

Again, one cannot help feeling that this sentence is about to disintegrate into two separate parts; note that the conjunctive bracket *kak ... i* could have contained a finite verb instead of the converb. It is no surprise that conjunctions could also introduce absolute converb constructions, cf. example (49) below.

It may be added that Old Russian converb clauses could also be introduced by conjunctions expressing semantic links which cannot be expressed even asyndetically by converbs in Modern Russian, such as *jako* in the comparative (“how”), consecutive (“so that”) and “objective” (“that”) meaning.

In contrast to absolute use, syndetic linking is ignored by grammarians at that time (Lomonosov, Barsov, Kurganov); obviously, they felt no need to codify this domain. Nevertheless, the ban on conjunctive linking also seems to go back to the eighteenth century; the *Gistorija o rossijskom matrose* (dating from the first half of the eighteenth century) still contains *deepričastija* introduced by hypotactic conjunctions, and in Kurganov’s *Pismovnik*, published for the first time in 1769, one also finds sporadic uses of paratactic linking.

In the final analysis, we are confronted here with the same situation as in the case of absolute constructions: the former freedom of choice (absolute use or not, syndetic or asyndetic link) has been given up in favor of a rather strict constraint; both changes are in contrast with the otherwise tolerant attitude

towards converbs, and both distinguish Russian from “western” languages (English, French, Italian, German), which means also that they cannot be explained by foreign influence. In the next section, we will try to find a solution to this riddle.

To sum up this section, let us quote from the *Kazanskaja istorija* (1564–1565) one more example from Old Russian which violates about every restriction converbs are subject to in modern language:

- (49) *i po lugom bezčislanno mertvyx byst', jako i*
 and on meadows innumerable dead were, so that even
silnomu konju ne mogušču dolgo skakati po
 strong-DAT horse-DAT not being-able-DAT longtime jump over
trupiju mertvyx kazancev.
 corpses dead-GEN Kazanians'
 ‘and on the meadows there were innumerable dead warriors, so that
 even a strong horse could not jump over the dead Kazanians for a
 long time.’

This example contains the active converb *mogušču* which is (i) an inflected (ii) short form, (iii) takes its own overt subject *konju* which is (iv) not coreferential with any noun phrase in the remaining sentence and (v) is introduced by a conjunction expressing (vi) consecutivity – this adds up to six fundamental mistakes, seen from the point of view of current Russian! Being a Russian converb must have been a much more comfortable feeling in the sixteenth century than nowadays.

5. A possible solution

Let us now try to get a grasp on the global outlines of the recent evolution of Russian converbs. The loss of syndetic linking and of absolute constructions may be interpreted in the following way: while Russian converbs in the past behaved much like finite verbs in taking their own subjects and being introduced by both hypotactic and even paratactic conjunctions, they now live a separate life, having become verbal forms *sui generis*. Putting it in terms of sentence structure, we may reinterpret this as a loss of syntactic autonomy: while in Old Russian a sentence containing a converb tended to disintegrate into two more or less independent parts, related only loosely to each other, its modern Russian counterpart is closely centered around the main predicate, the converb being tightly bound to it³². What has been considerably increased then is the subordinate status of converbs, in other words: their appropriateness for the back-

grounding of secondary predications and thus for creating more hierarchical ordering within discourse structure.

Besides this, the ban on conjunctions has brought about an additional source of vagueness, since converb constructions now oscillate more often than not between different (e.g., temporal, causal, instrumental or conditional) readings. It may be added that where there are conflicting controllers, what arises is also an increase of ambiguity. It goes without saying that vagueness and ambiguity are not absent from Old Russian converb constructions either, since not every converb had an overt subject, nor was it introduced by a conjunction; but still, there were more disambiguating devices available than nowadays. By this, we by no means claim that their loss in recent times need to be evaluated negatively, since vagueness and ambiguity may in certain situations be preferable for the speaker and even serve an esthetic purpose.

All this, however, does not explain the radical changes which occurred in the eighteenth century. The point is that up to this period, Russian had in both of the respects here examined been less restricted than “western” languages such as French, German or English, whereas from this point on it was subject to greater constraints. But why should Russian do without absolute constructions and syndetic linking, while other languages still retain these devices? Why should Russian converbs behave less like finite verbs and be less autonomous than their counterparts in English or the Romance languages? One is not surprised at the disappearance of absolute datives, since these forms were isolated in more than one respect: they were inflected, moreover in a case whose appearance was difficult to understand, and marked as bookish. But why not preserve absolute constructions with the new indeclinable *deepričastie* (see examples [38] and [42]), much as French or English do? In the same way, one has no difficulty in understanding why Russian has got rid of paratactic conjunctions like *and* before and after converbs, but why not allow for a couple of hypotactical conjunctions, say *if*, *because*, *when* or *though*, similar to French or English? There must be some inner force responsible for the radical restructuring of converb clauses in modern Russian.

At this stage we should recall the preference for zero expressions in spoken Russian. As is shown in Weiss (1993 a), this variety simply abounds in elliptical devices, zero signs and related phenomena. They can be found in the domains of reference (elision of deictic or anaphoric subject pronouns, zero subjects in indefinite personal, generalized personal and impersonal sentences), predication (zero copula, omission of verbs denoting actions) and sentence connection (different types of asyndesis). In most of these domains, modern spoken Russian offers more possibilities of “zeroing out” grammatical or lexical information than other Slavic languages, not to speak of “western” languages such as French,

English or German. Moreover, it allows for all possible combinations of such zeros or elisions, in other words: referential and predicative, predicative and connective, referential and connective and even referential, predicative and connective zeros or ellipses may occur in clusters within the same sentence. The communicative impact of this technique can be described in terms of economy, vagueness and ambiguity. The greatest common denominator of all pertaining facts turns out to be implicitness, which works in favor of the speaker and at the cost of the hearer by forcing the latter to participate more actively in the decoding of the message.

Now, it seems crucial that what resulted from the reorganization of Russian converbal syntax as the end of the seventeenth century was precisely the obligatory combination of zero reference (no overt subject) and zero connection (no conjunctions). Moreover, as is argued in Weiss (1990), implicit subjects of converbs and elliptical subject pronouns in finite clauses share many properties; in particular, requirements concerning their antecedent/controller (constraints on quantifiers, thematicity and subject status, referential status, etc.) are practically identical. In the same way, the ban on introductory conjunctions in converb clauses may be compared with asyndetic linking of finite clauses, which is particularly current in spoken Russian. It is tempting then to explain the modern constraints on converbal constructions as the effect of borrowing from colloquial syntax: the former bookish converbal constructions which had nothing in common with spoken language would thus have been replaced by structures recalling colloquial subject elision and asyndetic clausal linking.

At first glance, this interpretation seems highly speculative. But even if we dismiss it, the recent history of Russian converbs has to be seen against the background of the overall evolution of the Russian literary language in the eighteenth century, which can be described as a gigantic compromise between the former "low" variant, vernacular by origin and close to spoken language, and its "high" counterpart which was considerably influenced by (if not identical with) Church Slavonic. As for the role of the latter, the eventual merging of high and low variants resulted in the retention of some Church Slavonic elements and the elimination of others. This can be illustrated by the survival of the active participial forms with *-uščij/-aščij* and *-(v)ščij*, on the one hand, and the loss of datives absolute, on the other. Now, the *deepričastija* forms were vernacular, but they must have disappeared from the spoken language at later stages. The loss of their peripheral uses (i. e., absolute constructions and syndetic linking), notwithstanding their support via the influence of French, may then well have been the price at which they managed to survive in the written language.

A final word may be said about the evolution of other Slavic languages. The Russian case is, as it turns out, not exceptional at all: in Church Slavonic, Old

Czech and Old Polish absolute constructions with overt subjects were possible though not frequent,³³ and paratactic conjunctions occurred regularly according to the following patterns: <participle + *i* + finite verb> and <finite verb + *a* + participle> (Kurz 1958: 89–107, Sokołowska 1976: 73–77). In both Polish and Czech, the seventeenth century saw a considerable increase of overt subjects and conjunctive ties. Later, however, their percentage fell continuously, and as a result, all modern Slavic languages share today the ban on absolute constructions and on syndetic linking. This remarkable convergence with Russian is probably to some extent due to the influence exercised by the latter on some of them (Bulgarian, Serbo-Croat and Czech) during their revival in the nineteenth century.

The case of Polish, however, calls for a different explanation. Unlike Old Russian, the absolute dative was completely unknown in this language; absolute constructions with indeclinable participles were however quite frequent in the seventeenth century and enjoyed, due to French influence, a second blossoming during the second half of the eighteenth century (Sokołowska 1976: 91). Grybosiova (1975: 96) even quotes an example from S. K. Potocki's tale "A Journey to Darkburg" (1820). It may be recalled that Lomonosov had denounced the foreign character of similar uses in Russian as early as 1757. As for syndetic linking, the use of paratactic conjunctions, already frequent at earlier stages, increased in the seventeenth century and continued to be possible for a long time; the latest examples to be found in official documents and literary texts date back to the beginning of the nineteenth century (Pisarkowa 1984: 224–225). On the contrary, hypotactic conjunctions such as *when*, *because* or *if* in the converb clause were practically unknown (in this respect, Polish differs again from Russian).

In this way, both absolute constructions and syndetic linking were subject to more restrictions in Polish than in Russian (no dative, no hypotactic conjunctions). Curiously enough, the Polish constructions reached their climax in the seventeenth century, much like their Russian counterparts. The reasons for these developments were however totally different: in Polish literature, the increase of paratactic conjunctions and constructions with overt subjects was especially salient in memoirs, i. e., in a genre which may be supposed to have been influenced by oral usage and which is categorized as low style:³⁴ in contrast to this, in Russian literature of the sixteenth and seventeenth century it is the "high" genres that abound in dative absolute constructions and admit introductory hypotactic conjunctions, both of which were alien to the spoken language. One may hypothesize that it is exactly because of this greater proximity to spoken language that the loss of both phenomena occurred later in Polish than in Russian. However this may be, the ultimate reason for the eventual loss of syndetic linking as

well as the absolute use of converbs could well be the same as in Russian: a type of syntactic construction no longer extant in spoken usage underwent a restructuring, which resulted in its consistent subordination to the main predicate. To attain this, its peripheral uses had to be sacrificed.

Abbreviations

ACC	accusative	NOM	nominative
COMP	comparative	PART	participle
CONV	converb	PASS	passive
DAT	dative	PERS	person
GEN	genitive	PF	perfective
INF	infinitive	PL	plural
INSTR	instrumental	PRET	preterite
IPF	imperfective	REFL	reflexive
LOC	locative	SG	singular

Notes

* I would like to express my gratitude to I. A. Mel'čuk for his inspiring and helpful comments on this paper. Needless to say, that I am solely responsible for all remaining mistakes.

1. The term *gerund*, still frequently used for the same phenomenon, should be dismissed because of its ambiguity: it is more appropriate for verbal nouns of the Latin or English type.
2. Some of them can, however, be combined with the *deepričastie budući* 'being', giving periphrastic passive converbs; for their use, see section 2, examples (8) to (10).
3. Active participles occur in adverbial function only in coordination with *deepričastie* forms.
4. For further evidence on converbs as so-called strong complements (obligatory actants), see also Růžicka (1980: 176–179).
5. The position of the attribute depends in general on its length and its syntactic complexity (presence of additional actants, etc.): the shorter and less elaborate the attribute, the more likely it is that it will precede the head noun. This rule is of course not unique to participles, but holds also for adjectives.
6. Rappaport (1980: 291–294). The influence of detachment on the temporal interpretation of the converb should not be overestimated, however. Rappaport's claim that the relative tense of detached clauses is free does not give an adequate picture of the real state of affairs.
7. Rappaport (1980: 290), who quotes this example as well, finds the variant with *znaja* acceptable.
8. This restriction seems to have escaped Isačenko; it is however stated by Rozenal' (1974: 318).
9. Rozenal' (1974: 315–316). A similar mistake is reported to occur with Polish converbs with *-(w)szę*, which can be formed only with perfectives (e.g., *napisawszy*), but are due to their obsolescent character also used by some native speakers with imperfectives (**pisanwszy*).

10. This process lasted several centuries: according to Borkovskij and Kuznecov (1963: 354), the first participles not agreeing with their head nouns occur as early as in the eleventh century. By the end of the fourteenth century, lack of agreement had become regular (1963: 351).
11. The same reason lead to the rise of similar new perfectlike tenses in West Slavic, where however the verb *have* serves the purpose of the auxiliary in the active. The same is true for Balkan Slavic. Foreign influences may have played an important role in both areas (cf. the corresponding periphrastic tenses in German and Balkan Romance), whereas this in the case of the Russian dialects seems rather improbable.
12. Avanesov (1982: 410).
13. Sometimes it is claimed that perfective *deepričastija* may be used with posterior meaning, cf., e.g., Rappaport (1980: 289) or Bondarko (1987: 262–263, 271–273). As a rule, the evidence adduced to support this belongs to two types: either, the converb denotes some action immediately following that of the main verb or even overlapping it, or else the posteriority has to be specially marked by adverbs such as *potom* ‘after this’.
14. For the different types of double verbs, their functions and restrictions, see Weiss (1993 b).
15. Unlike in the other languages, German prefers here a passive model which indicates that the implicit subject cannot be the speaker but the whole clause: cf. Russian *točnee govorja*, English *strictly speaking*, but German *genauer gesagt* ‘said more precisely’. In this sense, the German construction is not as “absolute” as its counterparts.
16. This use was also known in nineteenth century Polish, cf. the following quotation from the Polish writer Prus, cited by Buttler et al. (1973: 414): *Nie dochodząc do rogu ulicy, jest herbaciarnia* ‘just before the corner of the street, there is a teashop’. In modern Polish, this sentence is simply ungrammatical. It seems not clear however if this is a syntactic borrowing from Russian or a relic of a formerly more widespread use: during the seventeenth century, when there was no ban on absolute constructions, converbs like *idąc* ‘going’, *wchodząc* ‘entering’, etc. were frequently used as equivalents of local prepositions, much in the same way as they were used in contemporary Russian official documents, cf. Sokołowska (1976: 111–112).
17. This example is also remarkable in another respect: it presents a nonsubject as controller of the converb, namely the dative experiencer *Marksu*.
18. The warning against converbs controlled by the subject of passive sentences seems to be a matter of constant concern of normative authors, cf. also Rozentel’ (1974: 325). Interestingly enough, it can be found also in Polish normative work, cf. Buttler et al. (1973: 412). Converb control by the agentive noun phrase is not mentioned there, and we have no indications that it ever occurs in actual speech.
19. One more particular case may be adduced to illustrate what is meant by this: Standard Russian allows for sentences with double topics of the type *Sidjaščie keto opustil golovu, keto zadumalsja* ‘The (people) sitting there, some bowed their head, others were deep in thought’. Such sequences of a wider and a narrower topic (*sidjaščie - keto*) much remind us of similar constructions in Chinese such as ‘This tree, its branches are broken’, considered by Li as a typical feature of topic prominence.
20. Quoted from Savina (1989), the most comprehensive study on such pronominal adjuncts of converbs.
21. Note that also the pronouns *ves’*, *sam* and *každyj* mentioned above are related to exhaustive enumeration.
22. The arguments in support of the vernacular origin to be found in Borkovskij–Kuznecov (1963: 450–451) and Borkovskij (1978: 429–432) are in my opinion not in the least convincing.
23. Strictly speaking, this is not an instance of the absolute use since the latter implies no argument sharing between main and subordinate clause. In our example, however, the pronouns *ja* and *mnoju* are coreferential.

24. See Kurganov ([1793]: 73) and Barsov ([1981]: 223). It may be added that Kurganov in his own practice as a writer neglected the ban on absolute overt subjects, cf. the example quoted from his *Pismovnik* by Bulaxovskij (1958: 404). Given the general awkwardness of his style, which was later to become the object of Pushkin's sarcastic remarks, this use was probably idiosyncratic.
25. That the puristic attitude must have been decisive for his argumentation can be seen from the fact that in the following paragraph (533) of the same work he complained about the loss of the absolute dative, which he evidently deemed to be vernacular.
26. This, in turn, may have occurred for extraneous reasons: Yokoyama (1980: 270) attributes it to the introduction of new narrative genres via French literature. One should keep in mind that this change affected only the written language; in colloquial speech, subject deletion is still possible and occurs frequently.
27. Curiously enough, this syndetic linking constraint and its exceptions seem never to have been stated in an explicit way up to now.
28. To these we may add *pričem* 'and (elaborating)': about 20 percent of all occurrences of this conjunction are constituted by cases of "secondary" use (see Weiss 1991: 308–311).
29. In the same way, an implicit temporal meaning of the converb can subsequently be made explicit by adding to the main clause *posle éтого* 'after this', and the instrumental reading of a preposed converb may be indicated by a following *tem samym* 'by this'.
30. Rozental' (1974: 326) quotes from Tolstoy an example with the adversative *no* 'but'; the adds however that this use is now obsolete.
31. As is shown by the variant *tol'ko istoščiv*, Russian admits focusing adverbs located before converbs (cf. also example [33]). Other focusing elements possible in this type of clauses would be *liš'* 'only' and *daže* 'even', whereas *osobénno* 'particularly' or *imenno* 'just, exactly' are excluded: **Osobénno rešiv étu zadaču*, ... **Iménno rešiv étu zadaču* ... Moreover, even *isključitel'no* 'exclusively' does not work, although it is nearly synonymous with *tol'ko*.
32. This idea is already expressed by Potebnja (1888: 187).
33. In medieval Czech, they make up only 0,08 percent of the whole bulk collected by Dvořák (1970) (two examples in the fourteenth and two in the fifteenth century). This figure rises at the end of the sixteenth century and reaches its peak in the seventeenth century, when, for instance, in Slavaty's work absolute uses constitute as much as 28,9 percent of all converbs found. In the following century the the average figure fell again to only 0,73 percent (Dvořák 1970: 37–45).
34. Oral syntax and low style are, according to Dvořák (1970), also responsible for a similar increase of these "deviations" in seventeenth century Czech. Moreover, in the eighteenth century, when absolute constructions had become less frequent, their frequency was still higher in memoirs than in religious literature.

References

- Apresjan, Jurij D.
 1974 *Leksiteseskaja semantika* [Lexical semantics]. Moscow: Nauka.
- Avanesov, Ruben I. (ed.)
 1982 *Istoričeskaja grammatika russkogo jazyka. Morfologija: glagol* [A historical grammar of Russian. Morphology: The verb]. Moscow: Nauka

- Barnetová, Vilma–Helena Běličová-Křížková et al. (eds.)
 1979 *Russkaja grammatika* [Russian grammar]. Vols. 1–2. Prague: Academia
- Barsov, Anton A.
 1783–1788 *Rossijskaja grammatika* [Russian grammar]. Pod redakcij i s predislovijem B. A. Uspenskogo. Moscow: Izdatel'stvo Moskovskogo universiteta.
- [1981]
 Boguslavskij, Igor' M.
 1977 "O semantičeskom opisanii russkix deepričastij: neopredelennost' ili mnogoznačnosť?" [On the semantic description of Russian converbs: Indefiniteness or ambiguity?], in: *Izvestija AN SSSR, serija 1 literatury i jazyka* [Reports of the Academy of Sciences, Literature and language series] 36: 270–282.
- Bondarko, Aleksander V. (ed.)
 1987 *Teorija funkcional'noj grammatiki. Vvedenie. Aspektual'nost'. Vremennaja lokalizovanost'. Taksis* [A theory of functional grammar: Introduction; Aspectuality; Temporal localization; Taxis]. Leningrad: Nauka.
- Borkovskij, Viktor I. (ed.)
 1973 *Sravnitel'no-istoričeskij sintaksis vostočnoslavjanskix jazykov. Složnopodčinennye predložennija* [Historical-comparative syntax of East Slavic languages: Subordinate clauses]. Moscow: Nauka.
 1978 *Istoričeskaja grammatika russkogo jazyka. Sintaksis. Prostoe predloženie* [Historical grammar of Russian: Syntax; Simple sentence]. Moscow: Nauka.
- Borkovskij, Viktor I.–Petr S. Kuznecov
 1963 *Istoričeskaja grammatika russkogo jazyka* [Historical grammar of Russian]. Moscow: Izdatel'stvo Akademii Nauk
- Bulaxovskij, Leonid A.
 1958 *Istoričeskij kommentarij k russkomu literaturnomu jazyku* [A historical commentary on the Russian literary language]. (5th edition.) Kiev: Radjans'ka škola.
- Buttler, Danuta–Halina Kurkowska–Halina Satkiewicz
 1973 *Kultura języka polskiego. Zagadnienia poprawności gramatycznej* [The cultivation of Polish: Aspects of grammatical correctness]. Warsaw: Państwowe Wydawnictwo Naukowe.
- Dvořák, Emil
 1970 *Vývoj přechodníkových konstrukcí ve starší češtině* [The evolution of converbal constructions in ancient Czech]. Prague: Univerzita Karlova.
 1978 *Přechodníkové konstrukce v nové češtině* [The evolution of converbal constructions in modern Czech]. Prague: Univerzita Karlova.
- Forsyth, James
 1970 *A Grammar of aspect: Usage and meaning in the Russian verb*. Cambridge: Cambridge University Press.
- Givón, Talmy
 1990 *Syntax: A functional-typological introduction*. Vol. 2. Amsterdam–Philadelphia: Benjamins.
- Grybosiova, Antonina
 1975 *Rozwój funkcji składniowej imiesłowów nieodmiennych w języku polskim. Związki z nomen* [The development of the syntactic functions of converbs in Polish: Nominal links]. Wrocław-Warsaw: Państwowe Wydawnictwo Naukowe.
- Haspelmath, Martin
 this volume "The converb as a cross-linguistically valid category".
- Hopper, Paul
 1979 "Aspect and foregrounding in discourse", in: *Discourse and syntax* (Syntax and semantics, vol. 12), T. Givón (ed.). New York: Academic Press, 213–241.

Ickovič, Viktor A.

1982 *Očerki sintaksičeskoj normy* [Sketches on syntactic norm]. Moscow: Nauka.

Isačenko, Aleksander V.

1975 *Die russische Sprache der Gegenwart*. Formenlehre. (3rd edition.) München: Hueber.

König, Ekkehard-Johan van der Auwera

1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert-Giuliano Bernini-Claude Buridart (eds.), *Toward a typology of European languages*, Berlin: Mouton de Gruyter, 337-355.

Korotaeva, Eleonora I.

1964 *Sojuznoe podčinenie v russkom literaturnom jazyke XVII veka* [Conjunctive subordination in literary Russian in the seventeenth century]. Moscow: Nauka.

Kurganov, N.

1769 *Pismovnik soderžajščij v sebe nauk rossijskogo jazyka so mnogim prisovokupleniem raznogo učebnogo i poleznozabavnogo veščeslovija* [Textbook for self-study comprising a grammar of Russian with much additional teaching, useful and amusing material]. Saint Petersburg: pri Akademii Nauk.

[1793] [5th edition.]

[1978] [Reprinted. Würzburg: jal-reprint]

Kurz, Josef

1958 "Problematika zkoumání syntaxe staroslovenského jazyka a nástin rozboru významu částic *i*, *a* apod. v konstrukcích participiálních vazeb s určitými slovesy" [Problems of the exploration of the syntax of Old Church Slavonic and outlines of a semantic analysis of the particles *i*, *a* etc. in converbal links with definite words], in: *K historicko-srovnávacímu studiu syntaxe slovanských jazyků* [Towards a historical-comparative study of the syntax of Slavic languages]. Prague: Státní Pedagogické Nakladatelství, 89-108.

Li, Charles N.-Sandra A. Thompson

1976 "Subject and topic: A new typology of language", in: Charles N. Li (ed.), *Subject and topic*, New York: Academic Press, 457-488.

Lomonosov, Mixailo V.

1757 *Rossijskaja grammatika* [Russian grammar]

[1952] [Reprinted in: *Polnoe sobranie sočinenij*, t. 7: *Trudy po filologii gg.*, Moscow-Leningrad: Izdatel'stvo Akademii Nauk SSSR, 389-582.]

Mel'čuk, Igor' A.

1974a "O sintaksičeskom nule" [On syntactic zero signs], in: A. A. Xolodovič (ed.), *Tipologija passivnyx konstrukcij* [A typology of passive constructions]. Diatezy i zalogi. Leningrad: Nauka, 343-361.

1974b *Opyt teorii lingvističeskix modelej "smysl ↔ tekst"* [Outlines of a theory of linguistic meaning-text models]. Moscow: Nauka.

Nedjalkov, Vladimir P.

this volume "Some typological parameters of converbs".

Padučeva, Elena V.

1985 *Vyskazyvanie i ego sootnesennost' s dejstvitel'nost'ju (referencial'nye aspekty semantiki mestoimennij)* [The utterance and its relation to reality (referential aspects of the semantics of pronouns)]. Moscow: Nauka.

Pisarkowa, Krystyna

1984 *Historia składni języka polskiego* [A history of Polish syntax]. Wrocław-Warsaw: Wydawnictwo PAN.

Potebnja, Aleksander

- 1888 *Iz zapiske po russkoj grammatike* [Notes on Russian grammar]. (2nd edition.) Char'kov: Izdanie Knižnago magazina D. N. Poluextova.

Prijatkina, A. F.

- 1974 "Vtoričnye sojuznye svjazi" [Secondary conjunctive links], in: *Issledovanija po slavjanskoj filologii* [Explorations in Slavic philology], Moscow: Nauka, 269–274.

Rappaport, Gilbert

- 1980 "Deixis and attachment in the adverbial participles of Russian", in: *Morphosyntax in Slavic*, C. V. Chvany–R. D. Brecht (eds.), Columbus, OH: Slavica Publishers, 273–380.
1984 *Grammatical function and syntactic structure – the adverbial participle of Russian*. Columbus, OH: Slavica Publishers.

Rozental, Ditmar Ė'.

- 1974 *Praktičeskaja stilistika russkogo jazyka* [Practical stylistics of Russian], Moscow: Vyssšaja Škola.

Růžicka, Rudolf

- 1978 "Erkundungen für eine Typologie der syntaktischen und semantischen Strukturen der Gerundien (Adverbialpartizipien) in modernen slawischen Literatursprachen", in: *Zeitschrift für Slavistik* 23: 229–244.
1980 *Studien zum Verhältnis von Syntax und Semantik im modernen Russischen*. Berlin: Akademie-Verlag.
1982 "Kontrollprinzipien infinitiver Satzformen: Infinitiv und Gerundium (deepričastie) im Russischen und in anderen slawischen Sprachen", in: *Zeitschrift für Slavistik* 27: 373–411.

Savina, V. M.

- 1989 "O mestoimenijax podležaščnoj svjazi v sostave deepričastnyx oborotov" [On subject-linked pronouns within converbal constructions], in: A. B. Pen'kovskij (ed.), *Russkie mestoimenija: semantika i grammatika* [Russian pronouns: Semantics and grammar]. Vladimir: Vladimirskij gosudarstvennyj pedagogičeskij institut, 101–105.

Sokołowska, Teresa

- 1976 *Funkcje składniowe imiesłowów nieodmiennych w języku polskim XVII wieku*. [Syntactic functions of converbs in the Polish language of the seventeenth century]. Wrocław-Warsaw: Wydawnictwo PAN.

Šmeleva, Tat'jana V.

- 1984 "Deepričastija na službe u modusa" [Converbs at the service of mood], in: V. A. Belošapkova (ed.), *Sintaksičeskije struktury* [Syntactic structures]. Mežvuzovskij sbornik. Krasnojarsk: Izdatel'stvo Krasnojarskogo universiteta, 64–70.

Švedova, Nina Ju. (ed.)

- 1980 *Russkaja grammatika* [Russian grammar]. Vols 1–2. Moscow: Nauka.

Talmy, Leonard

- 1978 "Figure and ground in complex sentences", in: J. H. Greenberg (ed.), *Universals of Human Language*, Vol. 4. *Syntax*. Stanford: Stanford UP, 625–649.

Weiss, Daniel

- 1977 *Syntax und Semantik polnischer Partizipialkonstruktionen im Rahmen einer generativ-transformationellen Sprachbeschreibung*, Bern–Frankfurt: Peter Lang.
1990 "Nominale Ellipse und sekundär-prädikativer Verweis im Vergleich", in: *Linguistische Arbeitsberichte* 73: 58–80.
1991 "Russisch *pričem* – eine Konnexion der dritten Art?", in: K. Hartenstein–H. Jachnow (eds.), *Slavistische Linguistik 1990*. München: Kubon and Sagner, 301–326.
1993 a "Die Faszination der Leere. Die moderne russische Umgangssprache und ihre Liebe zur Null", in: *Zeitschrift für Slavische Philologie* LIII, 48–82.

- 1993 b "Dvojnye glagoly v sovremennom russkom jazyke" (Double verbs in Modern Russian), in: F. Fici-Giusti (ed.), *Kategorija skazuemogo v slavjanskix jazykax: modal'nost' i aktualizacija* (The category of predicate in Slavic languages: modality and actualization), *Akty meždunarodnoj konferencii, Certosa di Pontignano (Siena)* 26.–29. 3. 1992. München: Kubon and Sagner, 67–97.

Wierzbicka, Anna

- 1988 *The Semantics of grammar*. Amsterdam: Benjamins

Yokoyama, Olga A.

- 1980 "The history of gerund subject deletion in Russian", in: C. V. Chrany–R. D. Brecht (eds.), *Morphosyntax in Slavic*. Columbus, OH: Slavica Publishers, 260–272.
- 1983 "V zaščitu zapretnyx deepričastij" [In defence of forbidden converbs], in: M. S. Flier (ed.) *American contributions to the ninth international congress of slavists*, Vol. 1. *Linguistics*, Columbus, OH: Slavica Publishers, 373–381.

The Hungarian converb or verbal adverbial in *-va/-ve*

Casper de Groot

Introduction¹

This chapter is concerned with the Hungarian verbal forms ending in *-va/-ve*, as for instance in the following examples.²

- (1) *A gyerek-ek énekel-ve sétál-t-ak*
the child-PL sing-CONV walk-PAST-3p
'The children walked, singing.'
- (2) *Az ajtó csuk-va van*
the door close-CONV COR.3s
'The door is closed.'

These forms are usually called 'verbal adverbials' or 'adverbial participles'.³ Since the constructions with the verbal forms in *-va/-ve* share most properties of the constructions which are discussed by Haspelmath in the introductory chapter to this volume, we shall adopt the term 'converb'. The chapter is organized as follows. Section 1 presents general typological information about Hungarian. Section 2 illustrates differences between converbs and other word categories in Hungarian. Internal properties of the converbal phrase are discussed in section 3. External properties of the converbal phrase, i. e., the converbal phrase in the clause, are dealt with in section 4. Finally, section 5 discusses different aspects of the periphrastic construction with a converb.

1. General typological information

Hungarian is spoken by about 14 million people and belongs to the family of Finno-Ugric languages. It is an agglutinative language, which marks a number of grammatical distinctions on verbs, adjectives, nouns, and adverbs. There is a morphological contrast between two tenses (past/non-past), two aspects (imperfective/perfective), three moods (possibility, conditional, and imperative), three persons and two numbers (singular/plural). Moreover, there are two paradigms

of person marking suffixes on the verb. The choice of a paradigm is determined by the quality of the object, i.e., the object being definite or indefinite (cf. [5 a–b]).⁴ It is possible to leave subject and object NPs unexpressed (cf. [3 a] where the subject is not expressed). A third – again different – paradigm of person marking suffixes applies to nouns, adpositions, and case affixes. Hungarian does not distinguish between different genders. The order of bound morphemes is fixed. The expression of perfective aspect is a bound morpheme when it immediately precedes the verb and a free morpheme in other cases. The distributions of the two patterns is conditioned by pragmatic factors. In (3 a) there is emphasis on the perfectivity of the action and in (3 b) the emphasis is on *the book*. Consider:

- (3) a. *A könyv-et el-olvas-hat-t-am.*
 the book-ACC PFV-read-MOD-PAST-1s2f
 'I could have read the book.'
- b. *A könyv-et olvas-hat-t-am el.*
 the book-ACC read-MOD-PAST-1s2f PFV
 'I could have read the book.'

Hungarian does not distinguish different voices. There is just one (active) voice. Hungarian has an elaborate case system. Apart from a large number of cases, it also has a number of postpositions. Consider the following examples:

- (4) a. *Péter level-et kap-ott Mari-tól.*
 Peter letter-ACC receive-PAST.3s1f Mary-ABL
 'Peter received a letter from Mary.'
- b. *A ház mögött van egy kert.*
 the house behind COP.PRES.3s1f a garden
 'There is a garden behind the house.'

In typological studies Hungarian is usually classified as SOV. The neutral word order in clauses with a transitive verb and an indefinite object is indeed SOV. However, if the object is definite the most natural order is SVO. Consider the following examples and note also the different conjugations of the verb:

- (5) a. *Imre level-et ír.*
 Imre letter-ACC write.3s1f
 'Imre is writing a letter.'
- b. *Imre ír-ja a level-et.*
 Imre write-3s2f the letter-ACC
 'Imre is writing the letter.'

Constituent order in Hungarian is relatively free (cf. É. Kiss 1981 and De Groot 1981). All twenty-four permutations of a clause such as (4a) are grammatical Hungarian sentences. For instance:

- (6) a. *Péter Maritól levelet kapott.*
 b. *Maritól Péter kapott levelet.*
 c. *Levelet Maritól kapott Péter.*

The examples shown as (6), however, can only occur in a specific context or situation. From a pragmatic point of view, word order in Hungarian can be characterized in the following way: the initial part of the clause contains topical elements – elements about which something is predicated – followed by a position which contains the focus, i.e., the constituent which carries the most salient information. After this position the verb follows. Schematically, the Hungarian clause has the following pattern:

- (7) NP ... NP NP V NP ... NP
 topic focus verb neutral

The rule that the constituent with the function of focus immediately precedes the verb is not reversible, i.e., the constituent in front of the verb does not necessarily have the function of focus. Clauses which do not have an explicit focus may have other constituents in front of the verb (cf. É. Kiss 1981).

Question words take the position immediately preceding the verb. Note the pragmatic value of question words: they are focal. Consider:

- (8) a. *János Mari-tól mi-t kap-ott?*
 John Mary-ABL what-ACC receive-PAST.3s1f
 ‘What did John receive from Mary?’
 b. *A level-et ki-től kap-t-a?*
 the letter-ACC who-ABL receive-PAST-3s2f
 ‘From whom did he receive the letter?’

Polar interrogatives are distinguished from declarative sentences by a rising intonation contour. Apart from this particular sentence intonation pattern the interrogative particle *-e* may optionally be attached to the verbal or non-verbal predicate. If one wishes to stress one’s curiosity or doubt, one will use the particle *vajon*. For instance:

- (9) *Vajon level-et küld-ött-e János-nak?*
 Q.PT letter-ACC send-PAST.3s1f-Q John-DAT
 ‘Did she send a letter to John?’

Comparatives in Hungarian can be expressed in two different ways. The word order in the following examples is the unmarked or most natural ordering pattern. Consider:

- (10) a. *Kálmán nagy-obb Zsolt-nál.*
 Kálmán big-COMP Zsolt-ADES
 'Kálmán is bigger than Zsolt.'
- b. *Kálmán nagy-obb mint Zsolt.*
 Kálmán big-COMP than Zsolt
 'Kálmán is bigger than Zsolt.'

The word order within noun phrases is fixed and follows the following pattern (cf. Dezső 1969 and Kornai 1985):

- (11) a. DEM ART NUM ADJ REL (nonfinite) NOUN REL (finite)
 b. *Az a két új könyv, amely-et vett-em.*
 that the two new book that-ACC bought-1s1f
 'Those two new books that I bought.'

Within embedded nonfinite clauses, word order is relatively free. The position of the present and past participle, however, is fixed: it takes the final position. If a constituent within a participial construction carries the pragmatic function of focus, it is placed in the position preceding the participle. Compare the following two examples:

- (12) a. *A tegnap könyv-et olvas-ó fiú.*
 the yesterday book-ACC read-PRES.PTCP boy
 'The boy who was reading a book yesterday.' (lit. 'the yesterday book reading boy.')
- b. *A könyv-et tegnap olvas-ó fiú.*
 the book-ACC yesterday read-PRES.PTCP boy
 'The boy who was reading a book yesterday.' (lit. 'the book yesterday reading boy.')

The word order pattern of participial constructions is schematically the following:

- (13) NP ... NP NP Participle
 Focus

The order of constituents within converbal clauses does not follow this pattern in the sense that NPs may follow the converb. An element with the function of focus, however, immediately precedes the converb (cf. section 3.3. below).

2. The category of converb

This section illustrates differences between converbs and other word categories in Hungarian.

2.1. Nonfinite verb forms

In Hungarian the following nonfinite verb forms can be distinguished:

- i. infinitives, marked by the suffix *-ni*;
- ii. present participles, marked by the suffix *-ó/-ő*;
- iii. past participles, marked by the suffix *-(V)t*;
- iv. converb or adverbial participles, marked by the suffix *-va/-ve*.

The distribution of the different forms does not differ from the one we find in many other languages: infinitives can be used as complements of verbs, the participles operate as attributes of nouns, and converbs modify verbs with reference to manner or circumstance. Infinitives are noun-like, participles are adjective-like, and converbs are adverb-like. Compare:

- (14) a. *Könyv-et akar.*
book-ACC want.3s1f
'He wants a book.'
- b. *Énekel-ni akar.*
sing-INF want.3s1f
'He wants to sing.'
- (15) a. *az okos fiú*
the clever boy
'the clever boy'
- b. *az énekel-ő fiú*
the sing-PRES.PTCP boy
'the singing boy'
- (16) a. *a szép dal*
the beautiful song
'the beautiful song'
- b. *az el-énekel-t dal*
the PFV-sing-PAST.PTCP song
'the song sung'
- (17) a. *Gyors-an dolgoz-ik.*
quick-ADV work-3s
'He works quickly.'

- b. *Énekel-ve dolgoz-ik.*
 sing-CONV work-3s
 'He works, singing.'

2.2. Adverbs

Converbs differ from manner adverbs in the following fashion: manner adverbs are based on adjectives and converbs are based on verbs. Manner adverbs in Hungarian are marked by the suffixes *-on/-en/-ön*, or *-ul/-ül*, as for instance in the following example.⁵

- (18) *Mari szép-en/rossz-ul énekel.*
 Mary beautiful-ADV/bad-ADV sing.3s
 'Mary sings beautifully/badly.'

Converbs, however, may be coordinated with adverbs which are inflected by *-on/-en/-ön*, or *-ul/-ül*. For instance:

- (19) *szerény-en és küszködve*
 modest-ADV and struggle-CONV
 'modestly and struggling'
- (20) *Értetlen-ül vagy kételked-ve követ-t-ék*
 uncomprehending-ADV or not.believe-CONV follow-PAST-3p2f
fejtegetés-ei-m-et.
 argumentation-PL-1s-ACC
 'They followed my argumentations, not understanding or not believing me.'

2.3. Adpositions

In Hungarian there are adpositions which originate from converbs. A clear example is *múlva* 'after' as in *egy óra múlva* 'after one hour'. The converb *múlva* from *múlik* 'pass' is not used any longer. There are, however, forms which are used both as converbs and as adpositions. Compare the following two examples with *nézve* 'looking/seen' as converb in (21) and as postposition in (22):

- (21) *A kert-re néz-ve mond-t-a ...*
 the garden-SUBL see-CONV say-PAST-3s2f
 'Looking at the garden he said ...'
- (22) *Er-re nézve nincs kifogás.*
 this-SUBL seen NEG.COP.3s objection
 'From this point of view there is no objection.'

The major difference between converbs as in (21) and adpositions as in (22) is the following: in the case of converbs one of the arguments of the converb is coreferential with an argument of the main verb (see section 4 below). Adpositions, as illustrated in (22), do not have this property.

The adpositions in *-va/-ve* still govern case. *Nézve*, for instance, governs the sublative case (cf. [22]), and *fogva* the ablative case as in *at-tól fogva* (that-ABL since) 'since that time'. The adposition *kivéve* 'excepted/excepting' behaves differently: (i) *kivéve* is a preposition and not a postposition (cf. [23] and [24]); and (ii) *kivéve* can be used governing the accusative case, but also as a nongoverning adposition. In the latter case the nominal element in the phrase with *kivéve* receives the case governed by the main verb of the clause (cf. [25] and [26]). The following example illustrates that nongoverning *kivéve* precedes the noun, i. e., is a preposition:

- (23) a. *Mindenki jön kivéve János.*
 everybody come.3s except John
 'Everybody is coming except for John.'
 b. **Mindenki jön János kivéve.*
 everybody come.3s John except

The preferred order with the assignment of the accusative is the reverse of (23 a):

- (24) *Mindenki jön János-t kivéve*
 everybody come.3s John-ACC except
 'Everybody is coming except John.'

The following two examples are further illustrations of different case assignments. *Kivéve* assigns the accusative case in (25); it does not assign a case in (26). Instead of the accusative the comitative case applies in (26), the case governed by the main verb *találkoz* 'meet'. Compare:

- (25) *Mindenki-vel találkozt-am, kivéve János-t.*
 everybody-COM meet-PAST-1s except John-ACC
 'I met with everybody, except for John.'
 (26) *Mindenki-vel találkozt-am, kivéve János-sal.*
 everybody-COM meet-PAST-1s except John-COM
 'I met with everybody, except for John.'

2.4. Converbs in compounds

There are two types of compounds in which converbs occur. In one case the grammatical category of the compound is still converb, in the other case the converb is not the head. First consider:

- (27) a. *váll-vet-ve*
 shoulder-throw-CONV
 'shoulder to shoulder, in cooperation'
- b. *száj-tát-va*
 mouth-open.wide-CONV
 'open-mouthed, gaping'

Compounds such as (27) can be considered examples of object incorporation. There is, however, no productive rule. The examples we find are rather idiomatic expressions.

Different from the examples (27 a–b) is the second type of compounding in which the converb is incorporated. Consider:

- (28) *nyit-va-tart-ás*
 open-CONV-keep-NZN
 'opening hours'

In examples such as (28) the converb functions as a predicative adjunct (see section 4.1.3. below). This type of compounding is not productive either.

3. Internal properties of the converbal phrase

This section concerns internal properties of converbal phrases from semantic, syntactic, and pragmatic points of view.

3.1. Semantic aspects

3.1.1. Class of verbs

Converbs can be formed from most verbs. There are no semantic restrictions other than that the verb must have a subject which can be coreferential with an argument of some other verb. This needs some explanation. Converbs cannot be used in absolute constructions, i. e., one of the arguments of the converb must be coreferential with one of the arguments of the main verb (see section 4.2. below). For that reason, weather verbs – which do not have a subject – do not have converbal forms (cf. [29]). Other classes of verbs which select subject clauses do not have converbal forms either (cf. [30]). Consider:

- (29) a. *Havaz-ik.*
 snow-3s
 'It snows.'

- b. **hava-z-va*⁶
snow-CONV
- (30) a. *Úgy tűn-ik hogy jön.*
so appear-3s that come-3s
'It appears that he comes.'
- b. **tűn-ve*
appear-CONV

3.1.2. Aspect, tense, and mood

Converbs can be marked for imperfective and perfective aspect. This difference is illustrated by the following two examples: in (31) the converbal affix is combined with imperfective *olvas* 'read' and in (32) with perfective *elolvas* 'read':

- (31) *A könyv-et olvas-va sétálgat-ott János.*
the book-ACC read-CONV walk-PAST.3s John
'John walked up and down while reading the book.'
- (32) *A könyv-et el-olvas-va, János meg-ír-t-a a cikk-é-t.*
the book-ACC PF-read-CONV John PF-write-PAST-3s2f the article-3s-ACC
'After reading the book, John wrote his article.'

Converbs cannot be marked for different tenses. Mood does not apply either.

3.2. Syntactic aspects

In contradistinction to present and past participles, the converb does not have to be in the final position of its phrase. Examples (33 a–b), for instance, show that the order of constituents may be converb plus object or object plus converb:

- (33) a. *Kimond-va az igazság-ot ...*
tell-CONV the truth-ACC
'Telling the truth ...'
- b. *Az igazságot kimondva ...*

As in finite clauses it is more natural to find indefinite objects preceding the converb and definite objects following it (cf. [5]). Compare:

- (34) *János zené-t hallgat-va tanul-t.*
John music-ACC listen-CONV study-PAST.3s
'John studied listening music.'

- (35) *János hallgat-va a zené-t tanul-t.*
 John listen-CONV the music-ACC study-PAST.3s
 'John studied listening to the music.'

Converbal phrases allow overt expression of the argument(s) which are not coreferential with an argument of the main verb (cf. examples [34] and [35]). Converbs may also be modified by adverbs. For instance:

- (36) *Az ajtó-t óvatos-an csuk-va, ...*
 the door-ACC careful-ADV close-CONV
 'Carefully closing the door, ...'

3.3. Pragmatic aspects

Converbal phrases may have a constituent with the pragmatic function of focus. As in the other participle phrases, the element with focus function immediately precedes the converb. Example (37), which contains a so-called *csak*-phrase, illustrates this fact. *Csak*-phrases have always the function of focus. The constituent *csak zavarral* cannot be placed after the converb (cf. example [38]).

- (37) *Az-t is csak zavar-ral küzd-ve*
 that-ACC also only embarrassment-INST fight-CONV
mond-juk ki.
 tell-1p2f PFV
 'That, too, we can tell only by fighting embarrassment.'
- (38) **Azt is küzdve csak zavarral mondjuk ki.*

4. External properties of the converbal phrase

This section concerns external properties of converbal phrases from semantic, syntactic, and pragmatic points of view.

4.1. Semantic aspects

4.1.1. Temporal relation between matrix verb and converb

Converbal constructions can have two interpretations, an imperfective interpretation and a perfective one. In the former case the construction is interpreted as describing simultaneous events. In the latter case the interpretation is either that the event expressed by the converb precedes the event expressed by the main verb, or that both events took place simultaneously and lasted for the same period of time. Consider:

- (39) a. *Beszélgel-ve sétál-t-unk.*
 (IMPV-)talk-CONV walk-PAST-1p
 'We walked talking.'
- b. *Fel-bátorod-va belép-t-ünk.*
 PFV-take.courage-CONV enter-PAST-1p
 '(After) taking courage, we entered.'

In earlier centuries the different interpretations were marked by two different suffixes, *-va/-ve* for the imperfect and *-ván/-vén* for the perfect converb. The form *-ván/-vén* still occurs in presentday Hungarian but is considered archaic, for instance:

- (39) b'. *Fel-bátorod-ván belép-t-ünk.*
 PFV-take.courage-CONV enter-PAST-1p
 'After taking courage, we entered.'

Forms in *-ván/-vén* also occur in a few isolated expressions such as *úgyyszólván* 'so to say', *nyilván* 'obviously'.

4.1.2. Adverbial phrase

Converbal phrases may function as adverbial phrases in a clause. They can have the semantic role of manner or circumstance. In the former case, the converbal phrase specifies the way in which the action is performed. These phrases relate to the verb, the subject or the object of the clause. Converbal phrases with the function of circumstance refer to a situation relevant to the contents of the clause. They do not relate to the verb or a constituent, but rather to the entire clause.

4.1.2.1. Manner

The following examples are illustrations of converbal phrases with the function of manner:

- (40) *Izgul-va, reszkeet-ve szeret-t-e a feleség-é-t.*
 be.excited-CONV tremble-CONV love-PAST-3s2f the wife-3s-ACC
 'He loved his wife in an exciting, trembling way.'
- (41) *Károly rohan-va jön a kert-ből.*
 Charles run-CONV come.3s the garden-ELATIVE
 'Charles comes running out of the garden.'
- (42) *Időnként megáll-t, ujj-á-t az írás alá*
 from.time.to.time stop-PAST.3s finger-3s-ACC the writing under
tett-e, és félhangos-an, mormol-va olvas-ott.
 put.PAST-3s2f and half.loud-ADV mumble-CONV read-PAST.3s1f
 'From time to time he stopped, put his finger under the text, and read in a subdued voice, mumbling.'

Converbal phrases with the function of manner usually consist of just the converb without any modifiers or overt expression of arguments.

4.1.2.2. Circumstance

Examples of converbal phrases with the function of expressing circumstances are the following:

- (43) *Julika elfárad-va ült le a szőnyeg-re.*
 Julie exhaust-CONV sit-PAST.3s down the couch-SUBL
 'Julie sat down on the couch exhausted.'
- (44) *A feleség-em egy húzatos kapu alatt ül, piros pléd-be burkolóz-va, egyetlen fotel-unk-on, és olvas.*
 the wife-1s a draughty gate under sit.3s red blanket-ILL
 wrap.oneself.up-CONV single armchair-1p-SUPERESSIVE and
 read.PRES.3s1f
 'My wife is sitting in a draughty gate, wrapped up in a red blanket, in our only armchair, and is reading.'
- (45) *Ingét maga elé tart-va áll.*
 shirt-3s-ACC self.3s front keep-CONV stand.3s
 'He was standing keeping his shirt in front of himself.'

Converbal phrases with the semantic function of circumstance may consist of just the converb (cf. example [43]). However, the majority of this type of phrases consist of more constituents (cf. examples [44] and [45]).

4.1.3. Predicative adjunct

Different from the function of converbal phrases as adverbial phrases is the function of converbs as predicative adjuncts. In these cases the converbal phrase specifies a noun phrase in the clause, predicatively. It does not have a semantic role comparable to the roles of the adverbial phrases mentioned above. Only those converbs occur in this type of construction which can be selected for the periphrastic or predicative construction to be discussed in section 5 below. An example is (46), but see also example (56) below:

- (46) *Mikor hall-ott-a a nevét így kimond-va.*
 when hear-PAST-3s2f the name-3s-ACC such pronounce-CONV
 'When did he hear his name pronounced in such way.'

Predicative adjuncts can be omitted without affecting the grammaticality of the sentence. Consider example (47) in which the converb seems to be a predicative adjunct at first sight:

- (47) *Hagy-j-uk nyit-va a kérdés-t.*
 keep-IMPV-1p2f open-CONV the question-ACC
 'Let's keep the question open.'

The converb in (47), however, cannot be left out without changing the meaning of the verb. Therefore one might analyze this type of construction as having a complex predicate, i.e., *nyitva hagyni* 'to keep open'. One might also argue that *hagyni* 'to keep' is a three place verb which takes a converb as its third argument comparable to other verbs which take an infinitive as their third argument. For instance:

- (48) *Mari-t lát-t-am úsz-ni.*
 Mary-ACC see-PAST-1s2f swim-INF
 'I saw Mary swim.'

4.1.4. Complement of a verb

In present day Hungarian there is one idiomatic expression in which a converb clearly is a complement of a verb. Compare (49) to (48).

- (49) *Zsuzsa sír-va fakad-t.*
 Zsuzsa cry-CONV burst-PAST
 'Zsuzsa burst into tears.'

In former stages of Hungarian this type of construction had a wider application (cf. Horváth 1991).

4.2. Syntactic aspects

4.2.1. Coreferentiality

An important property of converbs in Hungarian is that one of their arguments is coreferential with an argument of the main verb. Consider for instance:

- (50) *A szobá-ba belép-ve meglátott-a a szobro-t.*
 the room-ILL enter-CONV catch.sight-PAST-3s2f the sculpture-ACC
 'Entering the room, he caught sight of the sculpture.'

- (51) *A betegség-től legyöngül-ve már nem gondol-hat-t-am*
 the disease-ABL weaken-CONV already not think-MOD-PAST-1s
versenyzés-re.
 race-SUBL
 'Weakened by the disease, I could not even think of participating in the race.'

However, there is one construction which does not have this property of coreferentiality. The following example shows that converbs may have their own subjects under certain conditions:

- (52) *a gyerekek a szobá-ban lé-vén, a szülők nem akar-t-ak veszeked-ni.*
 the children the room-INES be-CONV the parents not
 want-PAST-3p quarrel-INF
 'The children being in the room, the parents did not want to quarrel.'

Constructions such as (52) with *lén* 'being', the verbal adverbial form of *van* 'be', form the only exception to the coreferentiality constraint.⁷ Compare for instance:

- (53) **Mari énekel-ve János dolgoz-ott.*
 Mary sing-CONV John work-PAST:3s
 'John was working, while Mary was singing.'

Further discussion of coreferentiality follows in the next section together with a discussion of the active and passive orientation of the constructions.

4.2.2. Active and passive orientation

In the adverbial use of the converb, the subject and also the object of the converb may be coreferential with the subject of the main predicate. Compare the following sentences:

- (54) *A katonák a város-t bekerít-ve harcol-t-ak.*
 the soldiers the town-ACC surround-CONV fight-PAST-3p1f
 'The soldiers, surrounding the town, fought.'
- (55) *A katonák (az ellenség által) bekerít-ve harcol-t-ak.*
 the soldiers the enemy by surround-CONV fight-PAST-3p1f
 'The soldiers, surrounded (by the enemy), fought.'

The soldiers in (54) functions as the agent of both *fight* and *surround*. In (55), however, *the soldiers* functions as the agent of *fight* and as the patient of *surround*. Example (55) therefore has a passive reading. Note, however, that there is no passive marker on the converb. Constructions such as (55) allow optional extension of an agent phrase. Note that present day Hungarian does not have a passive construction which corresponds to English *The book is written by Peter* as opposed to active constructions such as *Peter has written the book*. Two types of participial constructions, however, allow an agent phrase which corresponds to

the English *by*-phrase. The first type is the adverbial participle as shown in example (55). The other type is the past participle as in the following example:

- (56) *a János által olvas-ott könyv*
 the John by read-FAST.PTCP book
 'the book read by John'

The converb may also be used as a predicative adjunct (see section 4.1.3 above and section 5 below). In that case the subject of the converb may be coreferential with either the subject or the object of the matrix verb. The following example, which is ambiguous, illustrates the two possibilities. Consider:

- (57) *Berug-va hoz-t-a haza a vendég-ek-et János.*
 drink-CONV bring-PAST.3s2f home the guest-PL-ACC John
 'John brought the guests home drunk.'

Example (57) allows the interpretation that John is drunk, but also that the guest are drunk.

The object of the predicatively used converb may be coreferential with the object of the matrix verb, as example (58) illustrates. In that case the converbal phrase has a passive orientation.

- (58) *János a kávé-t meg-darál-va hoz-t-a be.*
 John the coffee-ACC PFV-grind-CONV bring-PAST-3s2f in
 'John brought in the coffee (that was) ground.'

Converbs predicatively used do not allow the presence of an agent phrase (see section 5 below). That is why constructions such as (58) do not allow an agent phrase, whereas constructions such as (55) do. Consider (59), which is ungrammatical:

- (59) **János a kávé-t Mari által meg-darál-va hoz-t-a be.*
 John the coffee-ACC Mary by PFV-grind-CONV bring-PAST-3s2f
 in
 'John brought in the coffee ground by Mary.'

Coreferentiality in constructions with a converb, the function of the converb, and the active/passive orientation can be summarized as in Table 1.

4.2.3. The position of converbal phrases in the clause

The order of constituents in Hungarian is rather free. This also holds with respect to the position of converbal phrases in the clause. Converbs are found in any position of the clause. The actual position of a converb is determined by semantic and pragmatic factors.

Table 1. Summary

Matrix verb	Converb	Function of converb	Orientation
Subject _i	Subject _i	Adverb	Active (54)
Subject _i	Object _i	Adverb	Passive (55)
Subject _i , Object _j	Subject _{i,j}	Predicative adjunct	Active (57)
Object _i	Object _i	Predicative adjunct	Passive (58)

Recall that the structure of the Hungarian clause is globally as follows: there is a marked position in front of the verb. One or more elements may precede the marked position and may follow the verb (cf. example [7]). If a clause contains a constituent with the function of focus, that constituent will be in the position preceding the verb. In those cases in which there is no focus, one other element may take that position. Such an element is for instance the indefinite direct object. Other elements are those which specify the verb, for instance the perfective aspect marker, or manner adverb phrases. Compare the following three clauses which may all be an answer to the question “What happened?” The answer to this type of question does not have a focus constituent, because the entire proposition counts as focus. Note the position of *könyvet*, *el-*, and *sóvárogra* in the following examples:

- (60) *János könyv-et olvas-ott.*
 John book-ACC read-PAST-3s1f
 ‘John was reading a book.’
- (61) *János el-ment a moz-i-ba.*
 John PFV-went.3s the movie-ILL
 ‘John went out to the movie.’
- (62) *János sóvárog-va néz-t-e a folyó-t.*
 John long-CONV look-PAST-3s2f the river-ACC
 ‘John looked longing at the river.’

Like adverbs, the preferred position of converbs with the semantic function of manner is preceding the verb.

Converbs with the function of circumstance do not modify the verb but rather the entire clauses. That is why this type of converbal phrases does not have the position preceding the verb as its preferred position. It is usually found in clause initial position or after the verb. Examples will be given in section 4.3 below.

4.3. Pragmatic aspects

This section concerns the pragmatic functions converbs can have. We distinguish between topic and focus function here. Although the pragmatic status of constituents in a clause can only be studied in relation to the context in which the clause is used, we limit ourselves here to investigating the possibility of converbs to be placed in positions preceding the verb.⁸ In section 4.2.2 we mentioned preferred positions of converbal phrases. Furthermore, a distinction has been made between converbs with the function of manner and the function of circumstance. In this section we shall discuss them separately.

4.3.1. Manner converbs

We have seen that in sentences which do not have a focus constituent, the manner converb is one of the candidates to be placed in the position preceding the verb. Manner converbs, however, may also be the element with the function of focus. For instance:

- (63) *Csak zihál-va szed-t-em a levegő-t.*
only gasp.for.breath-CONV gather-PAST-1s2f the air-ACC
'Only gasping for breath did I draw in air.'

- (64) *A lány nevet-ve dug-t-a vissza egy pillanat-ra a fej-é-t.*
the girl laugh-CONV put-PAST-3s2f back a moment-SUBL the head-3s-ACC
'Laughing, the girl lifted her head for a moment.'

Example (63) contains a *csak*-phrase, a phrase that always has the function of focus. Note that in the other example, (64), the particle *vissza* 'back' is placed after the verb, which indicates that the converb has the function of focus. If the converb did not have the function of focus the particle *vissza* 'back' would have been placed in the position preceding the verb (cf. [60]–[62] above).

The perfective marker and the manner converb are both candidates for the position in front of the verb in clauses without a focus constituent. When they are together in a clause the perfective marker precedes the verb and not the converb. The converb may be placed after the verb, but also before the perfective marker. For instance:

- (65) *Iszonyod-va le-hajt-ott-am a fej-em, behuny-t-am*
shudder-CONV PFV-BOW-PAST-1s2f the head-1s close-PAST-1s2f
a szem-em, hogy ne lás-s-ak.
the eye-1s that NEG see-IMP-1s
'Shuddering, I bowed my head, closed my eyes, so that I could not see anything.'

Example (65) constitutes a case in which the converb is in clause-initial position and the perfective marker is in the position preceding the verb. On the basis of the word order one may take this example to be a case in which the converb has the function of topic. We do not think that this is correct. Example (65) cannot (easily) be interpreted as a situation in which the converb is the topic of which it is relevant to predicate something. Note that the topic of clauses refer to entities and not to states of affairs.⁹ Since converbs do not refer to entities, they are not good candidates for the function of topic.¹⁰

In clauses with a focus constituent, the manner converb is placed after the verb, in many cases in the final position of the clause. Here are some examples:

- (66) *Ő az, aki minden-t tud a vállalat-nál,*
 he that who everything-ACC know.PRES.3s1f the company-ADES
mond-t-a mosolyog-va az igazgató.
 say-PAST-3s2f smile-CONV the director
 'He is the one who knows everything in the company, said the director smiling.'

- (67) *Csak Izolda néz-ett rám csodálko-z-va.*
 only Isolde look-PAST-3s1f at.me amaze-CONV
 'Only Isolde looked at me in amazement.'

In those cases in which the converbal phrase is used contrastively, it precedes the focus constituent. Consider (68) opposed to (67):

- (68) *Csodálko-z-va, csak Izolda néz-ett rám.*
 amaze-CONV only Isolde look-PAST-3s1f at.me
 'Amazed, only Isolde looked at me.'

4.3.2. Circumstantial converbs

Like the converbal manner phrases, the circumstantial converbs cannot be used as the topic of a clause. Circumstantial clauses in initial position are used to specify a setting to which the main clause is relevant. For instance:

- (69) *A pohar-at fel-elem-ve, el-mond-t-a a köszöntő-t.*
 the glass-ACC PFV-raise-CONV PFV-say-PAST-3s2f the toast-ACC
 'After having raised his glass, he proposed a toast.'

Circumstantial phrases with a converb can form the focus constituent of a clause, as for instance in example (70). The phrase *A poharat felemelve* functions as the focus of the clause. Note the position of the perfectivizing particle of the matrix verb: it does not precede but follows the verb.

- (70) *A pohar-at fel-elem-ve mond-t-a el a köszöntő-t.*
 the glass-ACC PFV-raise-CONV say-PAST-3s2f PFV the toast-ACC
 'He proposed a toast while raising his glass.'

4.3.3. Illocution

Converbal phrases can also be used as speech act qualifiers, as for instance in example (71):

- (71) *Kimond-va az igazság-ot, ...*
 tell-CONV the truth-ACC
 'Telling the truth, ...'

5. The converb in periphrastic constructions

5.1. General

Converbs also occur in periphrastic constructions, as for instance:

- (72) *Kéz-e-i gúzs-ba volt-ak köt-ve.*
 hand-3s.PL with-ILL COR.PAST-3p bind-CONV
 'His hands and feet were bound.'
- (73) *Miért van így meg-rémül-ve?*
 why COR.3s SO PFV-frighten-CONV
 'Why is he so frightened?'
- (74) *Meg vagyok lepőd-ve.*
 PFV COR.1s surprise-CONV
 'I am surprised.'
- (75) *Barná-ra volt-unk le-sül-ve.*
 brown-SUBL COR.PAST-1p PFV-sun.burn-CONV
 'We were sunburnt brown.'
- (76) *Kiderült, hogy nincs nagyon meg-bat-va.*
 turn.out-PAST that NEG.COR.3s very PFV-touch-CONV
 'It turned out that he is not very touched.'
- (77) *Be volt avat-va szintén a terv-be?*
 PFV COR.PAST.3s initiate-CONV also the plan-ILL
 'Was it also initiated into the plan?'

Native speakers of Hungarian have different judgements on the periphrastic construction with converbs. In general, they are inclined to say that the con-

struction is substandard or that the construction is typically used by children, sometimes with overgeneralization. The construction, however, is widespread. One finds many, many examples in everyday speech, but also in newspaper, scientific articles, and novels.

The periphrastic constructions are stative expressions. They may be classified as resultative constructions in the sense of Nedjalkov and Jaxontov (1988). As in the adverbial use of the converb, the aspectual distinction between imperfective and perfective plays a role in the periphrastic constructions as well. Compare the following two sentences in which the zero marking of imperfective aspect is indicated by \emptyset :

- (78) a. *Az ajtó \emptyset -csuk-va van.*
 the door IMPF-close-CONV COP.3s
 'The door is closed.'
- b. *Az ajtó be van csuk-va.*
 the door PFV COP.3s close-CONV
 'The door has been closed.'

Constructions (78 a) and (78 b) both indicate that the door is closed at the moment of speaking. However, constructions with the imperfective form of the converb such as (78 a), do not denote the same state of affairs as the construction with the perfective form of the converb, such as (78 b). The former type of construction denotes a state which is relevant at some time point, whereas the latter type of construction also has a resultative meaning.

The following examples show that both types of construction combine with different time distinctions:

- (79) a. *Az ajtó csukva van.*
 'The door is closed.'
- b. *Az ajtó csukva volt.*
 'The door was closed.'
- c. *Az ajtó csukva lesz.*
 'The door will be closed.'
- (80) a. *Az ajtó be van csukva.*
 'The door has been closed.'
- b. *Az ajtó be volt csukva.*
 'The door had been closed.'
- c. *Az ajtó be lesz csukva.*
 'The door will have been closed.'

5.2. Active and passive orientation

The predicative verbal adverbial construction is sometimes referred to as a passive, or passive-like construction. However, when we compare this type of construction with the prototypical passive constructions that we find across languages, it appears that the predicative construction in Hungarian differs from these constructions. The general principles underlying the formation of passive constructions are the following:

- i. Perspectivizing the states of affairs, i. e., the underlying object becomes the subject
- ii. Argument reduction, i. e., the reduction of the agent

Neither of these two principles applies in Hungarian, as is illustrated by example (81). The verb *szépül* 'become pretty' is a one-place verb. Perspectivization is not possible, because there is only one argument. The only argument of the verb is still present, hence there is no argument reduction involved.¹¹

- (81) *Ildikó meg van szépül-ve*
 Ildikó PFV COR.3s become.pretty-CONV
 'Ildikó has become pretty.'

A second reason for not considering the periphrastic construction a passive is that the periphrastic construction does not allow overt expression of the agent consider:

- (82) *Az óra meg van javít-va (*Pali által).*
 the clock PFV COR.3s repair-CONV (Paul by)
 'The clock has been repaired (*by Paul).'

Periphrastic constructions with converbs which originate from transitive verbs, however, do have a passive orientation.

5.3. Word order

The periphrastic construction can be considered a type of construction in which the converb is the non-verbal predicate. The prototypical distribution of pragmatic functions, the subject being the topic and the predicate being the focus, is also found in the periphrastic construction. The converb is prototypically the focus. In contrastive clauses, e. g., with emphasis on the subject, or in negative clauses, the converb does not have a particular pragmatic function. Converbs are not used as topic. The word order patterns in positive clauses with imperfective converbs are:

- (83) a. *Az ajtó_{Top} csuk-va_{Foc} van.*
 the door close-CONV COP.3s
 ‘The door is closed.’
 b. *Csukva_{Foc} van az ajtó.*
 c. *Az ajtó_{Foc} van csukva.*

In negative clauses, the converb is normally placed after the copula.¹² The subject may as a topic – which the converb cannot be – precede the negative copula. Compare:

- (84) a. *Az ajtó_{Top} nincs csuk-va.*
 the door NEG.COP.3s close-CONV
 ‘The door is not closed.’
 b. **Az ajtó csukva nincs.*
 c. **Csukva ninc az ajtó.*

If the perfective form of the converb is used, the word order is somewhat different. In the unmarked case, there is a discontinuous expression of the converb. The perfective marker is placed before and the converb after the copula. Consider:

- (85) a. *Az ajtó_{Top} be van csuk-va.*
 the door PFV COP.3s close-CONV
 ‘The door has been closed.’
 b. *Be van csukva az ajtó.*

In other cases, the converb together with the perfective marker follows the (positive or negative) copula, as the following examples show:

- (86) a. *Az ajtó_{Foc} van be-csuk-va.*
 The door COP.3s PFV-close-CONV
 ‘The door has been closed.’
 b. *Az ajtó_{Foc} nincs be-csuk-va.*
 The door NEG.COP.3s PFV-close-CONV
 ‘The door has not been closed.’
 c. **Az ajtó becsukva van.*
 d. **Becsukva van az ajtó.*

The periphrastic construction needs a focus preceding the copula. The copula in initial position yields ungrammatical clauses. Consider:

- (87) a. **Van csukva az ajtó.*
 b. **Van az ajtó becsukva.*

5.4. Class of converbs in periphrastic constructions

The class of converbs which can be used predicatively is limited. The limitation has to do with properties of the verbs from which the converbs are derived: (i) the quality of action of the verb; (ii) the semantic roles of the arguments; and (iii) the number of arguments of the verb.

5.4.1. *Telicity*

The verbs that occurs in the predicative converbal construction must be telic. A verb such as *javit* 'repair' exhibits this property, whereas a verb such as *dolgozik* 'work' does not. For that reason the converb *javitva* 'repairing' can, and the converb *dolgozva* 'working' cannot be used in a periphrastic construction. Consider the following examples, which are given together with a finite clause with the same verb:

- (88) a. *Zsuzsa dolgoz-ott.*
Zsuzsa work-PAST.3s
'Zsuzsa was working.'
- b. **Zsuzsa van dolgoz-va.*
Zsuzsa COR.3s work-CONV
- (89) a. *Pali meg-javit-ott-a az órá-t.*
Paul PFV-repair-PAST-3s2f the clock-ACC
'Paul repaired the clock.'
- b. *Az óra meg van javít-va.*
the clock PFV COR.3s repair-CONV
'The clock has been repaired.'

It is telicity which is the decisive factor for the ungrammaticality of (88) and not the number of arguments. One-place agentive telic verbs do occur in the predicative construction. Consider:

- (90) a. *Mag-borotvál-kozt-am.*
PFV-shave-REFL-PAST-1s
'I shaved myself.'
- b. *Meg vagyok borotvál-kozt-va.*
PFV COR.1s shave-REFL-CONV
'I have been shaved/I am shaved.'

Verbal reflexives of the type *borotválkoz(ik)* 'shave oneself' must be considered one-place verbs, because they do not allow the presence of a reflexive object pronoun. e. g., *magam-at* 'myself' [accusative].

5.4.2. *Agentivity and number of arguments*

In the case of nonagentive telic verbs the number of arguments plays a role. The following examples show that one-place nonagentive verbs can occur in the predicative constructions, whereas two- or three-place nonagentive verbs cannot:

- (91) a. *El-kop-t-ak az ajtó-k.*
 PFV-wear-PAST-3p the door-PL
 'The doors wore down.'
- b. *Az ajtó-k el van-nak kop-va.*
 the door-PL PFV COR.3p wear-CONV
 'The doors are worn down.'
- (92) a. *Meg-érez-t-e a veszély-t.*
 PFV-feel-PAST-3s2f the danger-ACC
 'He felt the danger.'
- b. **A veszély meg van érez-ve.*
 the danger PFV COR.3s feel-CONV
- (93) a. *Meg-kapt-am a level-et Mari-tól.*
 PFV-receive-PAST-1s2f the letter-ACC Mary-ABL
 'I received the letter from Mary.'
- b. **A levél meg van kap-va.*
 the letter PFV COR.3s receive-CONV

It is a remarkable fact that multi-place nonagentive verbs cannot occur in the predicative constructions. Note that there are no surface differences between these examples and the examples with an agent (88)–(89) with respect to the presence of the perfective marker *meg-* and a definite term with accusative case.

5.4.3. *Momentariness and number of arguments*

The following examples illustrate the relevance of momentariness and the number of arguments for the description of the predicative construction. Con-verbal forms of one-place momentary verbs do not occur in the periphrastic construction. Example (94) contains a one-place momentary verb. It is contrasted with an example of a one-place nonmomentary verb (cf. [95]). Example (96) exhibits a two-place momentary verb:

- (94) a. *El-indul-t a vonat.*
 PFV-leave-PAST.3s the train
 'The train left.'
- b. **A vonat el van indul-va.*
 the train PFV COR.3s leave-CONV

- (95) a. *Mari meg-szépül-t.*
 Mary PFV-get.pretty-PAST.3s
 'Mary got pretty.'
- b. *Mari meg van szépül-ve,*
 Mary PFV COP.3s get.pretty-CONV
 'Mary has got pretty.'
- (96) a. *El-indít-ott-a a vonat-ot.*
 PFV-make.leave-PAST-3s2f the train-ACC
 'He made the train leave.'
- b. *A vonat el van indít-va.*
 the train PFV COP.3s make.leave-CONV
 'The train has been made to leave.'

5.4.4. Patient versus direction

The second argument of the class of agentive telic verbs must have the semantic role of patient. Verbs with a directional second argument do not occur in the predicative construction. The following examples illustrate the difference. The directional verb *néz* 'look at' takes the perfective marker *rá*, the nondirectional verb *nézi*, however, takes the perfective marker *meg*. Also note the different case marking of the second arguments.

- (97) a. *Rá-néz-t-él a kert-re.*
 PFV-look-PAST-2s1f the garden-SUBL
 'You had a look at the garden.'
- b. **A kert rá van néz-ve.*
 the garden PFV COP.3s look-CONV
- (98) a. *Meg-néz-t-ed a kert-et.*
 PFV-look-past-2s2f the garden-ACC
 'You looked at the garden.'
- b. *A kert meg van néz-ve.*
 the garden PFV be:3s look-CONV
 'The garden has been looked at.'

The difference in grammaticality between (97 b) and (98 b) cannot be explained in terms of differential case assignment, as in the following putative rule: if a predicate selects an accusative case as a marker of the second argument, the corresponding predicative verbal adverbial construction is allowed; if a predicate selects a nonaccusative case the predicative construction is not allowed. Such an explanation is insufficient since it does not explain the ungrammaticality of constructions with predicates that take an accusative term which does not have

the function of patient (cf. [99]), or which has the function of patient in a noncontrolled predication (cf. [92]).

- (99) a. *Sétál-t-unke egy kilométer-t.*
 walk-PAST-1p a kilometre-ACC
 'We walked a kilometre.'
- b. **egy kilométer van sétál-va*
 a kilometre COR.3s walk-CONV

6. Conclusions

The general properties of the Hungarian converb can be summarized as follows.

- i. Converbs function as adverbs of manner or circumstance, on the one hand, and as predicates in stative, resultative constructions or predicative adjuncts on the other.
- ii. Converb phrases with the function of manner usually consist of just the converb without any modifiers or overt expression of arguments, whereas those with the function of circumstance easily allow for more constituents.
- iii. In contrast to other nonfinite clauses, such as present and past participial constructions, the converb does not have to be in final position of its syntactic domain.
- iv. Converb phrases may have an internal pragmatic organization. The element with the function of focus immediately precedes the converb.
- v. Converb phrases may fulfil the pragmatic function of focus within the matrix clause. They do not function as the topic, because converbal phrases do not refer to entities, but to states of affairs.
- vi. One of the arguments of the converb must be coreferential with one of the arguments of the matrix verb.
- vii. The class of converbs which can be used predicatively, is limited. The limitation has to do with properties of the verbs from which the converbs are derived: (a) the quality of action of the verb; (b) the semantic roles of the arguments; and (c) the number of arguments of the verb.
- viii. All types of converbal constructions, i.e., adverbial and predicative constructions, can have an active or a passive orientation.

Abbreviations

1f	first form	DEM	demonstrative
1p	first person plural	ILL	illative
1s	first person singular	IMP	imperative
2f	second form	IMPV	imperfective
2p	second person plural	INF	infinitive
2s	second person singular	INSTR	instrument
3p	third person plural	MOD	mood
3s	third person singular	MEG.COP	negative copula
ABL	ablative	NUM	numeral
ACC	accusative	NZN	nominalization
ADES	adessive	PFV	perfective
ADJ	adjective	PL	plural
ADV	adverb	PTCP	participle
ART	article	Q	question marker
COM	comitative	Q.PT	question particle
COMP	comparative	REFL	reflexive
CONV	converb	REL	relative
COP	copula	SUBL	sublative
DAT	dative		

Notes

1. I would like to thank Edith Moravcsik and the editors for their comments on an earlier draft of this article.
2. The form *-va* or *-ve* is determined by vowel harmony.
3. Cf. É. Kiss (1980), De Groot (1987, 1989). The term in Hungarian is *batározói igenév* (lit. 'adverbial participle').
4. The paradigm of suffixes that refers only to subjects is called "first form" (1f). The other paradigm that refers to subjects in combination with a definite object is called "second form" (2f).
5. The suffixes *-on/-en/-ön* and *-ul/-ül* are in complementary distribution.
6. Transitive *behavaz* 'snow under/over' allows the converb as for instance in *teljesen behavazva* 'snow-bound'.
7. It may be argued that the construction in example (52) is not a real counterexample against the property of coreferentiality. Note that Hungarian uses the form *lévén* and not *léve*. The latter form does not exist. The construction may be considered to be idiomatic and not productive. See also section 4.1.1 above.
8. See É. Kiss (1981 a, 1981 b) and De Groot (1981 a, 1981 b) for a discussion of these positions in relation to pragmatic distinctions.

9. Cf. Hannay (1991: 145).
10. If the converb phrase in (65) does not have the pragmatic function of topic, the example illustrates that also nontopical elements may be in clause initial position in Hungarian.
11. See De Groot (1989: chapter 6) for extensive discussion.
12. In those cases in which the converb is used contrastively, the converb is in sentence initial position.

References

Beke, Ödön

- 1913 "A -va -ve és -ván -vén képzőről" [On the formative suffixes -va, -ve and -vá, -vén]. *Magyar Nyelvőr* 42: 193–199.

Dezső, László

- 1969 "A főnévi csoport [The noun phrase]. *Általános Nyelvészeti Tanulmányok* 6: 25–158.

É. Kiss, Katalin

- 1980 "English participles and their Hungarian equivalents", in: L. Dezső–W. Nemser (eds.), *Studies in English and Hungarian Contrastive Linguistics*, Budapest: Akadémiai Kiadó, 63–92.
- 1981a "Structural relations in Hungarian, a "free" word order language". *Linguistic Inquiry* 12: 185–213.
- 1981b "Topic and focus: the operators of the Hungarian sentence". *Folia Linguistica* 15: 305–330.

Groot, Casper de

- 1981a "On Theme in Functional Grammar: an application to some constructions in spoken Hungarian", in: T. Hoekstra–H. van der Hulst–M. Moortgat (eds.), *Perspectives on Functional Grammar*, Dordrecht: Foris, 75–88.
- 1981b "Sentence-intertwining in Hungarian", in: A. M. Bolkestein, H. A. Combé, S. C. Dik, C. de Groot, J. Gvozdanović, A. Rijksbaron and C. Vet, *Predication and Expression in Functional Grammar*, London–New York: Academic Press, 41–62.
- 1987 "On the predicative verbal adverbial construction in Hungarian", in: I. Kenesei (ed.), *Approaches to Hungarian. Vol. 2. Theories and Analyses*, Szeged: JATE. 273–298.
- 1989 *Predicate structure in a functional grammar of Hungarian*. Dordrecht: Foris.
- 1990 "Auxiliary operator Inf and constructions with an infinitive in Hungarian", in: H. Pinkster–I. Genée (eds.), *Unity in diversity: Papers presented to Simon C. Dik on his 50th birthday*, Dordrecht: Foris, 73–91.

Hannay, Michael

- 1991 "Pragmatic function assignment and word order variation in a functional grammar of English". *Journal of Pragmatics* 16: 131–155.

Horváth, László

- 1991 "Mindig szabad bővítmény a határozói igenév?" [Is the verbal adverbial always a free adjunct?]. *Magyar Nyelv* 87 (1): 65–69.

Károly, Sándor

- 1956 *Igenévrendszerünk a kódexirodalom első szakaszában* [The system of Hungarian participles in the first period of codex literature]. (Nyelvtudományi értekezések 10.) Budapest: Akadémiai Kiadó.

Kornai, András

- 1985 "The internal structure of noun phrases", in: I. Kenesei (ed.), *Approaches to Hungarian. Vol. 1, data and descriptions*, Szeged: JATE, 79–92.

Molnár, János

- 1900 "A *-va -ve* képző természete [The nature of the formative suffix *-va, -ve*]. *Magyar Nyelvőr* 29: 313–317.

Nedjalkov, Vladimir P.–Sergej Je. Jaxontov

- 1988 "The typology of resultative constructions", in: V. P. Nedjalkov (ed.), *Typology of resultative constructions*, Amsterdam: Benjamins, 3–62.

Simonyi, Zsigmond

- 1907 "írva van, írva volt, írva lesz" [is written, was written, will be written]. *Magyar Nyelvőr* 36: 385–397.

Szepesy, Gyula

- 1974 "A *lenni + -va, -ve* igeneves szerkezet funkciói" [The function of the construction with *be + -va, -ve* participles]. *Nyelvtudományi Értekezések* 83: 593–597.
- 1980 "A *lenni + -va, -ve* igeneves szerkezet csonka változatai" [Incomplete variants of the construction with *be + -va, -ve* participles]. *Nyelvtudományi Értekezések* 104: 739–743.

On Turkic converb clauses

Lars Johanson

1. Turkic converb segments

The following remarks on certain diachronic aspects of the structure and use of Turkic converb clauses are also intended as a contribution to the general discussion of converbs, all the more as Turkic languages – like Mongolian, Tungusic, Korean, Japanese, Dravidian, etc. – exhibit particularly elaborate converb systems. Among all possible properties of Turkic converbs and the syntactic segments they carry, the focus will be on features relating to different levels of construction, to semantic modification, and – for some main types – to aspectual content.

Most features typical of converbs in the modern languages are already found in the oldest known Turkic texts.¹ In dealing with these common elements, we will take the *converb segment* (CS) to be a nonfinite unit which is constructionally subordinated to – a base segment (BS).^{2, 3} The converb segments, minimally consisting of a verb form, but expandable to full-fledged clauses, are provided with suffixed *subjunctors*, used much like subordinative conjunctions in European languages. The following example from Modern Turkish may provide a first illustration:

- (1) Turkish
 Ali gel-ince *Osman şaşır-d-ı.*
 Ali come-CONV Osman be surprised-TRM.PAST-3.SG
 CS=subjunct_{subjunct} BS=superjunct
 ‘When Ali came, Osman was surprised.’

2. Levels of construction

The formal patterns of Turkic converb syntax and the possibilities of linkage display various language-specific features. For the discussion of diachronic developments it is, however, essential to define, in a more general way, a few relevant levels of construction. The base segment with which the converb segment is in construction may be a full predication, a more reduced one, or a more limited predicative element. We distinguish four cardinal levels.

terminal predicators (see Johanson 1971: 133, 1976 a [1991 a]: 10–103, etc.).⁶ Thus, the Turkish present form *yaz-ıyor* ‘he writes’ seems to go back to the following construction:⁷

- (6) **yaz-a* *yori-r*
 write-CONV walk-AORIST.3.SG

Another common development is the reanalysis and grammaticalization of converb forms of individual verbs as connectives (postpositions, conjunctive adverbs, etc.), for instance, Turkish *gör-e* (*gör-* ‘see’) ‘according to’, *ol-arak* (*ol-* ‘become, be’) ‘being’, ‘as’, ‘in the quality of’, or *diye* (*de-* ‘say’) ‘saying’, ‘that’, a subjunctive marking complements to verbs of utterance, thinking, knowing etc., with causal, purposive and other meanings. (See Yüce 1973: 7–11, 19–20 for further examples.)

4. Turkic converb clauses

In the following, we shall deal exclusively with the levels 1 and 2. Here, the converb segments are *converb clauses*, nonfinite realizations of predications, basic text-building units participating in pluripredicate constructions within the limits of sentences. Within their superordinate base (‘matrix’) clauses they function as free adverbial adjuncts not required by any actancy pattern.⁸ The embedding is recursive in that converb clauses may contain converb clauses themselves. They may also be coordinated with each other, though this is seldom done by means of conjunctions. As is natural for basically head-final languages, a Turkic converb clause typically stands in the prefield of the predicate core of the superordinate base clause.⁹

The converb subjunctors signal various semantic relations between the converb clause and the base clause, i.e., aspectual, temporal and other relational ideas. Whereas the finite sentence is optimally marked for aspect, tense, mood, modality, personal reference, and illocution, converb clauses take no mood markers of their own, no ordinary tense markers, only restricted sets of aspect markers, and seldom person and number markers. They are frequently within the scope of the sentence operators. We shall deal with some of these properties below.

5. The formal structure of converb markers

Some converb subjunctors are primary in the sense of being morphologically unanalyzable, some are verbal nouns in an adverbial case, with a postposition, with an absolutely used noun, or with some other element added.

In Old Turkic proper, the first known written variety of Turkic documented mainly in inscriptions in so-called “runic” script (the eighth to the eleventh century), we find a number of converb markers which will be listed here, for the time being without any discussion of functions and without regard to the corresponding negative forms.¹⁰

1. Morphologically unanalyzable units:

- a. one with a suffix-final vowel (variants: *-a*, *-i*, *-yū*, etc.)
- b. the suffixes *-p* and *-pan* (the latter probably *-p* + instrumental)¹¹
- c. *-oġa*¹²
- d. *-ġali*.

It should be stressed that, in spite of numerous speculative proposals regarding the etymology, the origin of these oldest Turkic converbs is still unknown.

2. Verbal noun: *-sar*¹³

3. Verbal noun (*-duq*, etc.) in an adverbial case (dative in *-ġa*, logative in *-ḡa*, instrumental in *-an*), or with a postposition (*üčün* ‘because’).

4. Combination *-r* (aorist) + *ärk[ä]li*.

In later varieties, this general picture is preserved, but certainly also widened. In group 1, we find other morphologically unanalyzable units such as *-raġ*. The suffix *-sar* of group 2 changes to *-sa* and thus joins group 1. In group 3, there are numerous forms based on verbal nouns in adverbial cases (locative, dative, ablative, instrumental, equative), with postpositions, or with nouns in an absolute use. The combination with *ärk[ä]li* under 4 is followed by similar combinations (with *ärkän*, *ekän*, etc.).

6. Converb markers and function classes

Many Turkic predicator suffixes are, particularly in the older languages, rather versatile and not strictly bound to only one of the functions of marking sentences, adnominal clauses and complement clauses.¹⁴ Converb markers, however, are, as a rule, syntactically monofunctional (“noncombined”).

Though the Turkic converb has thus proved rather stable as a function class, there have nevertheless been some cases of transition, toward it and away from it.¹⁵ Besides, prototypical participles (verbal adjectives) may sometimes appear in converb-like functions. The “copredicative” use of *-mıġ* in modern Turkish seems to be influenced – or at least reinforced – by similar French constructions, e.g.:

- (7) Turkish
Bolu'dan ayrıl-mış Ankara'ya doğru yol al-ıyor-uz.
 Bolu-ABL depart-PST.PTCP Ankara-DAT straight way take-PRES-1.PL
 'Having left Bolu, we advance towards Ankara.'

7. First actant reference

Some converbs, mainly those representing group 3, carry subject representatives as markers of first actant reference, indicating person and number, for instance:

- (8) Old Turkic
olor-duq-a-m-a.
 sit-TRM.VN-POSS-1.SG.-DAT
 'as I sat down.'

These converbs represent the fixed first actant (fixed-A¹) type, which is typical of Yakut (cf. the similar situation in Tungusic languages). Most converbs, however, are uncommitted as to personal reference, representing the open first actant (open-A¹) ("unpersonal") type. In this case, the first actant of the converb clause and the base clause may be referentially identical or not. The "controller" of the nonrealized first actant of the converb clause may be the first actant or another actant of the superordinate clause, but also an "indirect" participant (for instance, the possessor of an actant) or a referent not mentioned in the sentence, but identifiable from the preceding discourse or situation. Thus, the first actant reference is often determinable by pragmatic inference only. The Turkic languages differ considerably from each other with respect to control conditions, the modern Europeanized norm languages generally tending to stricter syntactic principles.¹⁶ Still, all of them allow for cases where the first actant of a subjectless converb clause based on an open converb is not coreferential with the first actant of the base clause:

- (9) Old Uighur (Schulz 1978: 127)
Äsäke-ni ber-ginčä, bo: ye:m-ni ye:-zün.
 Donkey-ACC give-CONV this feed-ACC eat-OPT.3.SG
 'Until [someone] gives the donkey back, it shall eat this.'
- (10) Turkish (Swift 1963: 162)¹⁷
Tekrar izah ed-ince, anla-d-ım.
 Again explanation do-CONV understand-TRM.PAST-1.SG
 'Upon [someone's] explaining again, I understood.'

Though contrasting same first actant (same A¹) and different first actant (different-A¹) converbs are not typical of Turkic, some converbs tend towards one of these types, i. e., prefer one of the constructional levels 1 and 2. In such cases, then, the first actant of the converb clause is in some way “controlled” by the base clause. The conditions differ considerably across languages.¹⁸ There are no consistent comparative personal reference tracking (“switch reference”) systems where each converb signals either identity or change of first actant in the next predication. The diachronic tendency of some converbs towards the same first actant type will be dealt with below.

8. Semantic relations

What semantic relations between converb and base clauses are signalled by Old Turkic converbs? It seems that *-vali* expresses abtemporality (‘since’) and purpose (‘in order to’), *-sar* condition (‘if’), *-r ärke[ä]li* temporal inclusion and contrast (‘while’, ‘whereas’), *-duq* plus *üçün* reason (‘because’), *-duq* plus the ablative case marker means (‘by’), etc. In Old Uighur, the second known written Turkic variety (known from manuscripts in various alphabets from the eleventh century on), there are several additional units, among which *-vinča* is limitative (‘until’, ‘as long as’), *-yu* plus dative case markers purposive, *-maq* plus dative case markers causal, and *-maq* plus instrumental or ablative case markers is instrumental.

It is, however, obvious that certain converbs express aspectual ideas, various perspectives in which the events referred to are envisaged. In our discussion of these perspectives, we shall use the following terminology with respect to the cardinal aspectual categories: *Intraterminal* units envisage the event *within the limits* of its occurrence, *postterminal* ones *after its relevant limit*, whereas *terminal* units present the event directly and as a whole, implying *attainment of its relevant limit*.¹⁹ It is not unusual for aspectual units to combine or to vacillate between postterminality and terminality.

As far as the Old Turkic converbs are concerned, the marker 1 a (i. e., with suffix-final vowel) is clearly intraterminal, whereas 1 b (*-p*) and 1 c (*-°ča*) seem to be postterminal to terminal. In Old Uighur, there are, in addition, combinations of three units, an intraterminal *-r*, a postterminal *-miš* and a terminal *-duq*, with case markers (locative, dative, ablative, instrumental or equative). Thus we find, for instance, temporal converbs with the locative case marker such as *-r* plus *-da* (intraterminal), *-miš* plus *da* (postterminal), *-duq* plus *-da* (terminal). The complex marker *-r ärkän* is, like the equivalent *-r ärke[ä]li* in the inscriptions, intraterminal by virtue of its *-r* element.²⁰

Later written varieties of Turkic present similar situations.²¹ In the further development of the Turkic languages, there is an increasing number of converbs, expressing manifold relational ideas of aspect, sequence, manner, circumstance, etc. Sequential relations can be established by means of special converbs signalling relative anteriority ($_{\text{ant}}E_1 \Rightarrow E_2$; 'after'), relative posteriority ($_{\text{post}}E_1 \Rightarrow E_2$; 'before'), temporal inclusion ($_{\text{incl}}E_1 \Rightarrow E_2$; 'while'), limitation ($_{\text{lim}}E_1 \Rightarrow E_2$; 'us-que', 'until the relevant limit of E_1 is attained' (i.e., the relevant limit of the converb clause event is the final limit of the base clause event), etc.²² None of these temporal converbs express absolute tense meanings.²³

Aspectual units always form the core of the systems, though the expression of the cardinal categories is subject to considerable variation. To facilitate comparison, etymologically identical forms of different languages and developmental stages will, in the following, be written in stereotyped forms within angular brackets. Thus, the above-mentioned converb category with suffix-final vowels will be rendered as $\langle A \rangle$, $-p$ and its etymological relatives as $\langle B \rangle$, $-\text{ö}čä$ etc. as $\langle IČA \rangle$, the aorist $-r$ as $\langle R \rangle$, $-miš$ as $\langle MŠ \rangle$, the similar category $-yan$ as $\langle GN \rangle$, $-yač$ as $\langle GČ \rangle$, the comparative suffix $-raq$ as $\langle RQ \rangle$, etc. Most languages possess intraterminals such as $\langle A+RQ \rangle$, $\langle R+LOC \rangle$, postterminals such as $\langle MŠ+LOC \rangle$, terminals such as $\langle B \rangle$, $\langle IČA \rangle$ etc.²⁴ Thus, for instance, $\langle B \rangle$ derives its functions from values established in oppositions with intraterminal converbs, normally $\langle A \rangle$.²⁵ There are, however, often functional differences between etymologically related forms.

9. Interpretations of aspectual converbs

The aspectual converbs present in all Turkic converb systems will be the main concern of the present contribution. First of all, it is important to state that their values are frequently mistaken for temporal or other meanings. This is largely due to approaches departing from language-independent cognitive contents and seeking language-specific devices for expressing them. Such analyses are, of course, perfectly legitimate; but as they easily overlook ideas which do not quite meet the linguist's expectations, unbiased search for language-specifically expressed ideas is a necessary corrective. Several Turkic converbs inevitably appear semantically "vague" if interpreted in such preconceived extrinsic terms. This is still the case in many grammars dominated by one-sided temporalistic thinking. Prejudiced European Turcologists have even claimed that languages with "vague" converb categories (not fitting into the aprioristic schemes) represent relatively primitive stages of linguistic development.²⁶

Contextual determination and pragmatic implications may suggest rather wide ranges of various readings. Aspectual values can, for example, be subject to temporal interpretation by taxis to the time of the base clause event: intraterminality as nonanteriority (temporal overlapping, simultaneity; “doing”), postterminality as anteriority (precedence; “having done”); see Johanson 1971: 100–104, 283, 1990b: 138–141, 1991b: 104–105.²⁷ Intraterminals may be interpreted in terms of durativity, manner, instrument, etc., postterminals in resultative, causal, and other terms. Terminal converbs such as are often claimed to express a multitude of relations, simultaneity, concomitance, cause, concession, purpose, comparison, manner, circumstance, condition, etc. (Džanmavov 1967: 43, 62–74, 275–277; Schulz 1978: 142–147). All these particular “contextual readings”, which may more or less correspond to the speaker’s intention and/or to the addressee’s interpretation, result from the predication linkage as such, and not from the converb; they are realizations under specific conditions, determined in complex ways by various semantic elements and pragmatic factors. None of them are pertinent converb values; few of them are systematically present under definable grammatical or semantic conditions.

10. Modification

A second important point to stress here is that the alleged problems of semantic indeterminacy of some converb markers, particularly in non-Europeanized Turkic varieties, also arise from a typical eurocentric fallacy, the identification of constructional subordination with semantic modification.

Modification [+mod] is taken here in the sense of converb clause information expressing a propositional restriction which determines, characterizes, modulates, explains or comments on the base clause event, specifying its circumstances, constituting a frame of reference for it, situating it cognitively (for instance, as to reason, purpose, consequences, conditions, etc.). If the converb clause content modifies the base clause content, it adds a feature which makes the latter more specified. We refer to modifying converb clauses as *satellites* and use the sign \Rightarrow for their special relationship to the superordinate clause (CS \Rightarrow BS).

Turkic converb clauses often function as satellites, answering to questions such as: When/how/under what circumstances does the base clause event occur? They thus provide further information about the kind of event, its sequential relations, its purpose and cause, its conditions and consequences, the degree, manner, means of its realization, etc. This property reduces their discourse relevance, their narrative value, their degree of communicative dynamics. Satellite

converb clauses typically do not assert, do not move the text towards its communicative goal, have only secondary relevance for the development of the central events, and may rather be interpreted as “backgrounding”, frequently even as “old (presupposed) information”. This discursive behavior emanates from the feature [+mod], modification.

All this is in accordance with the situation in modern standard average European languages, where temporal, conditional, causal, instrumental, comparative, and other modifications are expressed by subordination. Thus, European linguists often expect subordinated predications to be satellites in general and to be translatable by subordinate conjunctive clauses of their own languages. Turkish converb clauses are constructionally subordinated, but this does not prevent some of them from suggesting, in a rather systematic way, readings typical of European coordinate clauses.²⁸ This is only a consequence of their ability to be nonmodifying. From the feature [-mod] follows the ability to represent equal events, i. e., events of equal narrative rank with the base clause events. By virtue of this discourse relevance or narrative value, nonmodifying converb clauses may be interpreted as “foreground”, “new information”, and thus bring a text closer to its total communicative goal. We use the sign \Leftrightarrow for this special relationship between a subjunct and its superjunct, i. e., in this case, between the converb clause and the superordinate one (CS \Leftrightarrow BS).

Since this behavior is not typical of subordinate clauses in European languages, certain Turkish converb clauses have been claimed to be of “coordinative character”, though they only deviate in their ability of being nonmodifying. Subordinate predications may, in principle, be interpreted restrictively or non-restrictively. To be able to discover and describe covariation of subordination and modification, it is essential not to use identical terms for both concepts, for instance, to speak of subordinative constructions that “express coordination”, or confusing terms like “cosubordination” which seem to blur the borderlines between different independent criteria.²⁹

At level 1, converb clause satellites contribute to the specification of the full predication expressed by the base clause, for instance, *Ali gelince Mehmet gitti* ‘When Ali came, Mehmet left’, where *Ali gelince* adds a feature to the event of “Mehmet leaving”. In European languages, this modification is mostly expressed by finite adverbial clauses provided with conjunctions. At level 2, the modificatum is the predicate expressed by the base clause, e. g.,

- (11) Turkish
Ali gül-erek gir-d-i.
 Ali laugh-CONV enter-TRM.PAST.-3.SG
 ‘Ali entered laughing.’

where *gölerek* adds a feature to the activity of “entering”.³⁰ In several European languages, this modification is expressed by verbal noun plus case/adposition.

In modern Turkish, *-arak* is typically modifying intraterminal and *-ınca* modifying terminal, whereas *-p* may function as a nonmodifying terminal.

11. Scope of operators and focusability

Modifying converb clauses are outside the scope of illocutionary main clause markers signalling assertion. A main clause containing a converb clause is only asserted as a whole.³¹ Similarly, an interrogative operator carried by a base clause questions the whole block CS plus BS (the content of the base clause as modified by the converb clause), for instance, in modern Turkish:

- (12) Turkish
Ali gel-ince git-t-in mi?
 Ali come-CONV go-TRM.PAST-2.SG Q
 ‘Did you go when Ali came?’

Since satellites are focusable, however, the content of the converb clause can be interrogated separately by shifting the position of the operator, e. g.,

- (13) Turkish
Ali gel-ince mi git-t-in?
 Ali come-CONV Q go-TRM.PAST-2.SG
 ‘Was it when Ali came that you went?’

If, on the other hand, a converb clause is used in a nonmodifying way, it is integrated within the temporal, modal and illocutionary scope of its base clause, i. e., it shares the operators with it. See, for instance the following sentences:

- (14) Turkish
Gel-ip gör-sün.
 come-CONV see-OPT.3SG
 ‘Let him come and see.’

- (15) Turkish
Herkes çık-ıp ‘Ben Türk-üm’ di-yebil-meli.
 everybody come-out-CONV I Turk-COR.1.SG say-POSSIB-NEC.3SG
 ‘Everybody should be allowed to step forth and [should be allowed to] say that he is a Turk.’

The scope of the interrogation extends over the whole junction:

- (16) Turkish
Gel-ip gör-sün mü?
 come-CONV see-OPT.3.SG Q
 'Shall he come here and see?'

Only converb clauses used in a propositionally restrictive sense are focusable. We shall return to the interesting and complicated problem concerning the conditions under which the content of $\langle B \rangle$ clauses can be interrogated separately. The scope of negation will also be dealt with briefly in section 22.

12. Aspectual satellites and nonmodifying terminals

All Turkic languages possess intraterminal, postterminal and terminal satellites. The perspective they express is bound to some orientation point (O), which coincides with the localization point of the base clause event. Thus, the aspectual perspective on one event (E_1) at some orientation point modifies a second event (E_2) occurring there, for instance, $_{\text{intr}}E_1 \Rightarrow O=E_2$ or $_{\text{pst}}E_1 \Rightarrow O=E_2$. ($_{\text{trm}}E_1 \Rightarrow E_2$). Terminal satellites ($_{\text{trm}}E_1 \Rightarrow E_2$), imply attainment of the relevant limit of the converb clause event (E_1^*) as a condition for the base clause event: "as soon as/when/if E_1^* is reached", "on reaching E_1^* ". Terminal satellites are commonly based on converb types such as $\langle \text{İÇÄ} \rangle$, $\langle \text{DQ+LOC} \rangle$, $\langle \text{R+DAT} \rangle$.³²

All these satellites may be interpreted temporally (as simultaneous, preceding, etc.; "doing", "having done", "on doing"), but their perspectival meanings are the basic ones. In terms of narrative value, they typically present the converb clause event as backgrounded rather than equal to the base clause event, even if they do not necessarily convey "old information" only (cf. Foley 1986: 200).

Nonmodifying terminals can, however, by virtue of their terminal value, present the converb clause in a direct, event-oriented way, and, by virtue of the value $[-\text{mod}]$, nonmodification, present it as narratively on a par with the base clause content: $_{\text{trm}}E_1 \Leftrightarrow E_2$. The converb clause event is not bound to the base clause event, but presented as being of equal rank, as foreground information of primary narrative value. The linkage is rather " E_1 occurs, E_2 occurs" than " E_1 occurring, E_2 occurs". This does, of course, not exclude close connections between the events.

This nonmodifying terminal use is most typical of $\langle B \rangle$, Yakut *-an*, Chuvash *-sa*, Tuvan *-yaŝ*, etc. Still, it is a widespread and deeply rooted misunderstanding in European Turcology that these units are always used as adjuncts expressing circumstances connected with the base clause event.³³ Even if a circumstantial

reading is often a possible interpretational option, propositional restriction is not – and has apparently never been – a pertinent feature of ⟨B⟩.

Since ⟨B⟩ may present the converb clause event as on a par with the base clause as far as the narrative value is concerned, an Old Turkic (Orkhon Turkic) sentence such as:

- (17) Orkhon Turkic
Qışla-p sü: taşq[ə]-δ-amax
 winter-CONV army set.out-TRM.PAST-1.PL

should be rendered as ‘We wintered and [then] set out’ rather than as ‘After wintering, we set out’. Compare the following Old Turkic sentences (the first one Orkhon Turkic, the second one Old Uighur):³⁴

- (18) Orkhon Turkic
Türk bāglār bodan ögar-ap säβ-an-ap
 Turk lord-PL people rejoice-CONV be glad-CONV
tonat-mış köz-i yügärü kör-d-i.
 turn down-PST.PTCP eye-POSS.3.SG. upwards see-TRM.PAST-3.SG
 ‘The Turkic lords and people rejoiced, they were glad, and their downcast eyes looked upwards.’

- (19) Old Uighur
Ol öd-ün bo: üç tegin-lär ö:z
 That time-INSTR these three prince-PL self
könül-lär-in-dä-ki sa:qin-mış sa:β-lar-ı-n
 mind-PL-POSS.3.SG.-LOC-ADJ think-PST.PTCP word-PL-POSS.3.SG.-ACC
sö:xlä-ş-ıp ötrü örü tur-up ol ariγ
 speak-REC-CONV then up stand.up-CONV that wood
iç-in-dä taqı iç-gärü kir-d-i-lär.
 interior-POSS.3.SG-LOC also interior-DIR enter-TRM.PAST-3-PL
 ‘Then these three princes told each other what they thought deep in their hearts, and then they stood up and went deeper into that wood.’

13. Vacillation and diachronic development

The borderlines between postterminality and terminality or between modification and nonmodification are not always clear. Materials of earlier historical stages do not lend themselves to focusing tests and similar operations. There are differences between varieties and periods as far as the use of etymologically

identical units is concerned. Originally postterminal units seem to have been terminalized, roughly speaking, in the sense of “having done, he did” > “he did and [then] did”.³⁵ (As for , see Johanson 1990 b.)

The distinctions in questions are not always encoded in an unequivocal way. Some converbs seem to vacillate with respect to presenting events as “circumstantial” or “(narratively) equal”, and with respect to envisaging an ‘equal’ event in a postterminal or in a terminal perspective. This indeterminacy is obvious in several modern languages, for instance, with the type <GČ>, to which Tuvan *-vaš* belongs. The type <SA>, which, in other Turkic languages, is a modifying converb with conditional and postterminal uses (see, for instance, modern Kirghiz), may also function as a nonmodifying terminal in Chuvash. As for the nonmodifying terminal readings of the Kirghiz converb, Imart remarks that “la frontière avec le gérondif prédicatif circonstanciel reste toujours vague” (1981: 1598). Sentences such as:

- (20) Turkish
Otur-up konuş-t-uk.
 sit-CONV speak-TRM.PAST-1.PL

and

- (21) Kirghiz
Oqu-p tüšün-d-ü.
 read-CONV understand-TRM.PAST-3.SG

might be translated by ‘We sat down and talked’ and ‘He read and understood’ as well as by ‘Having sat down, we talked’ and ‘Having read, he understood’. One might, for instance, hesitate whether, in the Uzbek sentence

- (22) Uzbek
Tun ket-gač, tãñ aqar-gač, quš-lar sayra-y
 night pass-CONV dawn whiten-CONV bird-PL sing-CONV
bãšla-d-i.
 begin-TRM.PAST.3.SG

the two converb clauses based on *-gač* should be translated as: (1 a) postterminally envisaged circumstances (interpretable in terms of relative anteriority): ‘When the night had passed and it had dawned, the birds began to sing’; (1 b) terminally envisaged circumstances: ‘When the night passed and it dawned, the birds began to sing’; (2 a) postterminally envisaged equal events: ‘The night had passed, it had dawned, and the birds began to sing’; or (2 b) terminally envisaged equal events: ‘The night passed, it dawned, and the birds began to sing’. The readings (1 a) and (1 b) imply that the two converb clauses modify, en bloc, the

event of the last predication. This would be in line with Kononov's interpretation "Kogda noč' prošla i rassvelo, pticy načali pet'" ['When the night had passed and it had dawned, the birds began to sing.'] (1960: 243). The readings (2a) and (2b) imply no modification and would certainly not be less adequate.

It is, however, important to realize that the nonmodifying readings are indeed structurally justified. There are many cases – particularly obvious in chains of and <GČ> predications – where a modifying interpretation is excluded. The units in questions cannot be defined as "converbs" or "medial verbs" by criteria such as "subordination" vs. "cosubordination" in the sense of Foley–Van Valin (1984: chapter 6), since they indeed combine both types. And the situation is by far not so simple that these converb clauses represent the first type at level 2 (sharing the first actant with the base clause), and the second type at level 1 (having a different first actant).

14. Propulsion ("plot advancement")

In narrative texts, the interpretation of events as nonsequential or sequential may be contextual, for instance, follow from the general iconic principle of linear successivity (Johanson 1971: 246–247) which operates in case no other order relation is signalled.³⁶ Intra- and postterminal units are *ruptive*, as they break this successivity and do not propel the action (advance the "plot"). Non-modifying terminal units, on the other hand, are, by virtue of their values, particularly apt for ordering events in linear sequences. As for Turkish , it signals a unidirectional additive "and" relation (Johanson 1975 a [1991 a: 222]; cf. Bickel 1991: 35), often interpretable as chronological priority of the converb clause event (envisaged directly, as a whole, and a narratively equal) to the base clause event: "E₁ and [then] E₂", for example:

- (23) Turkish
Ali kay-ıp düş-t-ü
 Ali slip-CONV fall-TRM.PAST-3.SG
 'Ali slipped and fell.'

The unidirectionality allows for a propulsive ("plot-advancing") function, the ability to lead forwards to new points on the discursive agenda. In a monograph on aspect categories in Turkish, we suggested that *-arak*, much like the finite predictor *-iyor-d*, has the ability of expressly turning off the principle of ordering suggested by terminals (*-p* and *-d*), with resulting possible interpretations of "simultaneity", "subsidiary condition", "commentary", "instrument", "motivation", etc., and that this use is not temporal, but basically aspectual (1971:

261). Slobin (1988: 39 and in this volume) characterizes this proposal as an “intriguing solution”. It should, however, be emphasized that we did not try to reduce the function of *-arak* and *-yor-d-* to simply “turning off” the functions of contrasting forms. The interruption of the successivity suggested by terminal units is just one of the functions resulting from intraterminality.³⁷ It should also be kept in mind that discursive propulsion is often used to represent other kinds of priorities than just chronological ones.

15. Contextual readings

Thus, converbs of the type by no means link predications together in an “asemantic” way. On the other hand, they do not, as is sometimes claimed, signal a number of other relations between the predications (temporality, causality, instrumentality, conditionality, concessivity, etc.). conveys no additional semantic idea. Of course, the addressee is free to establish various other connections between E_1 and E_2 , for instance, “ E_1 occurs and [because of, as a result of, in spite of, under the condition of this:] E_2 occurs”. In our last Old Uighur sentence, (18), *turup* may be interpreted in accordance with the values just discussed, and in the same way as *sözläšip*. If we choose to give *turup* a “modal” interpretation, as Hanser does (1974: 171), this is rather arbitrary and by no means warranted by the converb itself.

In the Tuvan sentence

- (24) Tuvan (Šamina 1987: 94)
Aʔd-īm čit-käš, čaday qal-d-īm.
 horse-POSS.1.SG. get lost-CONV on foot remain-TRM.PAST.1.SG

the relations between the two events can be interpreted in terms of chronological order (E_1 is anterior to E_2), in other logical terms (E_1 is a condition or a reason for E_2) or in both ways: ‘After/as my horse had got lost, I had to walk’. As a matter of fact, the relation between the propositions is just as open as in European juxtapositions and coordinations such as *My horse got lost; [and] I had to walk*. It is left to the addressee to reconstruct a possibly intended logical relation (“therefore”, “thus”, “then”, etc.); but no such relation is encoded in the verb forms. It is not a sign of a more primitive stage of development, if some Turkic converbs display similar properties. It is a valuable linguistic function as such not to have to be more specific about interclausal relations; and there are always more explicit forms at the speaker’s disposal if needed.

16. Narrative chaining

Units of the kind just discussed thus represent the type of syndetic (“copulative”, “conjunctive”, “narrative”) converbs common in Central, South and Far East Asia (in Mongolian, Tungusic, Japanese, Nivkh, Hindi, Tamil, etc.). Since they can build up texts linearly, suggesting which events come earlier, they are ideal for the discourse function of narrative chaining. The capability of implying an additive relation is the minimum condition for this function. With satellite converb clauses, no simple linear serialization is possible in complex combinations, because they modify the contents of their base clauses recursively.³⁸ Non-modifying terminal converbs, on the other hand, allow for extended series, representing narratively equal events. In chains such as $\langle B \rangle / \langle B \rangle / \langle B \rangle / \langle B \rangle$, no individual nonfinal predication necessarily modifies the following one. On the other hand, the events represented in the chain are thematically tied to each other, each one representing just one portion of the message “packet”. In the following Kirghiz sentence, all the events represented are closely connected with each other; but none of the $\langle B \rangle$ predications functions as a circumstance of the next or the final one. (Compare, however, Imart 1981: 600.)

- (25) Kirghiz
Men erten menen tur-up, zaryadka žas-ap,
 I morning with stand.up-CONV gymnastics do-CONV
kiy-in-ip, žu:-n-up, čay iç-ip, mektep-ke
 dress-PASS-CONV wash-PASS-CONV tea drink-CONV school-DAT
bar-a-žat-am.
 go-PRESS-1.SG
 ‘In the morning I stand up, do gymnastics, dress, wash myself, drink tea, and go to school’.

In this type, events of thematically equal rank are represented by successive predications, of which the nonfinal ones are carried by terminal converbs, whereas the last member, the chain base, is a sentence-head form, optimally equipped with the syntactic-semantic information essential for the interpretation of the preceding chain links. A finite chain base is, as it were, the trunk by which the entire sentence is carried and through which it is rooted in the discourse “ground”. The sentence-final form may root the chain temporally, signalling, for instance, that all events represented are to be interpreted as occurring in the past. In narrative discourse types, there is little need for separate modal and illocutional marking of individual events. Chains may, however, also be based on nonfinite predicate cores, carrying “branches” in the “sentence tree”.

Propulsive converbs are central text-constructing units in all non-Europeanized narrative styles of Turkic languages. By means of the chaining technique, numerous converb clauses are easily concatenated within one sentence to form pluripredicate periods. Periodic chain sentences may be of considerable length and correspond to whole text paragraphs in other styles.³⁹ In all Turkic varieties, however, representation of temporally successive events by a series of sentences is a perfectly possible alternative technique, albeit far less dominant than in modern standard average European languages, which lack propulsive converbs.

It should be stressed that the difference between bi- and pluripredicate constructions is unimportant as far as the linguistic values of the converbs are concerned, and that extensive chaining is not based on any special qualitative features. The observation made by some authors that “syntactic dependence” (that is, constructional subordination) is not always accompanied by “semantic dependence” (i. e., modification) is valid irrespective of the number of events represented (cf. Juldašev 1977: 241–244).

17. Chain subdivision

Chaining techniques also include text-subdividing devices to signal tighter or looser bonds within the sentence. Generally, one type of converb signals a closer connection (generally , in a few languages <GČ>), whereas another one signals thematic hiatus, different relations of tension between the converb clause and the base clause: confrontation, contrast, comparison, polarization, antithesis, turning point, incision, for instance, “on the one hand”/“on the other hand”, “X, for his part ... Y, in his turn”.

In the following Chaghatay example, the intraterminal converb unit *keläduryanda* divides the sentence into two parts:

- (26) Chaghatay
Samarqand-din qač-ıp kel-äduryanda Sultan ʿAli Mirza
 Samarkand-ABL flee-CONV come-CONV Sultan Ali Mirza
čiq-ıp uruş-ıp bas-ıp öltür-d-i.
 set.out-CONV fight-CONV defeat-CONV kill-TRM.PAST-3.SG
 ‘When he just came fleeing from Samarkand, Sultan Ali Mirza set out, fought, defeated and killed him’.

The second converb of this sentence can safely be interpreted as modifying. But even if this option applies, such converbs can often be primarily regarded as “hiatus” devices. In the following Bashkir example, the closer connections are marked with /, and the hiatus with //:

- (27) Bashkir
Bëð kěj-ən-ëp,/ toqsay-ðar-ibið-ði aθ-ip,/ rəxmät
 We dress-PASS-CONV bag-PL-POSS.2.PL-ACC hang-CONV thank
äyt-ëp/ kürëş-käs, // ular bëð-gä yul öyrät-ëp/
 say-CONV say-farwell-CONV they we-DAT way teach-CONV
yëbür-ð-ë-lär.
 send-TRM.PAST-3-PL
 'We dressed, shouldered our bags, thanked them and said good-bye;
 and they showed us the way.'⁴⁰

There are old and widespread narrative sentence patterns using such devices in a systematic way. Not always, however, can the hiatus units be considered satellite converbs; this is particularly true of non-Europeanized varieties and styles, where <GČ>, <İÇA> and other units are often used in a nonmodifying way to mark narratively equal sequences of events (see Johanson 1992 b and in press a).

Since it is only natural that the cut in the chain is often accompanied by first actant shift, there may be a certain covariation of hiatus forms and reference shift. As already mentioned, however, no Turkic language has a consistent comparative personal reference tracking system in which converbs signal identity or change of first actant in the next predication. It is not the main function of the hiatus forms to signal "switch reference". Tuvan *-r ... γa* is used as a hiatus form marking a looser connection of the events than *-γaʃ*.⁴¹ By virtue of this, it tends towards level 1 and noncoreferentiality (the different first actant type), but it is not a genuine shift form, since it can also be coreferential, for example:⁴²

- (28) Tuvan (Šamina 1987: 45)
Bir minn-ir-im-gä, a:l čan-in-da
 once be.conscious-CONV.1.SG village surrounding-POSS.3.SG-LOC
täy qir-in-da ün-üp käl-gän čor män.
 hill edge-POSS.3.SG-LOC go.out-CONV come-PERF.1.SG
 'As I regained consciousness, [I found that] I had arrived at the
 edge of the hill outside the village.'

18. Europeanization

One important diachronic development is a gradual assimilation of the dominant written registers of many Turkic languages to modern European ones. In the latter, subordination covaries strongly with modification and is not typically used to express series of narratively equal events. Thus, as a rule, nonmodifying Turkic converb clauses cannot be rendered adequately by subordinated clauses

in these languages. Under predominantly Russian and French influence, subordination has come to be used more in accordance with European text-building patterns, copied onto the Turkic systems. The use of nonmodifying converbs has been restricted, which has led to a certain atrophy of the converb syntax in some languages, particularly in the western parts of the Turkic world. In modern Turkish, for instance, the use of has been decreasing.⁴³

First of all, there is a historical development limiting the use of nonmodifying converb clauses at level 1. Whereas Old Turkic and many later varieties do not prescribe any systematic “subject control” – in the sense of first actant determination – by the base clause, some modern varieties apply severe constraints on level 1 and new “control” conditions. The modifying <A> converbs have always tended to the same first actant type. Thus, for instance, modern Turkish *-arak* is highly limited at level 1. The similar tendency of is a more recent one. This unit has largely developed from the varying first actant type of converb to the same first actant one. Level 1 is in general more easily permitted when there is a stronger semantic connection between the converb clause and the base clause. If there is no such connection, as at level 2, due to a common first actant, at least some entities of the converb clause and the base clause are referentially involved in each other, say, by part-whole or *possessor-possessum* relationships. In some languages, constructions of level 1 have become rather marginal; for Turkish, see Csató-Johanson 1993.⁴⁴ The fact that is subject to far fewer limitations at level 2 supports König and van der Auwera’s implicational contention that if a language has both “same-subject” and “different-subject” marking constructions and one of these patterns is marginal, it is usually the latter that plays the marginal role (1990: 340).

With the loss of at level 1, the periodic chain sentences of genuinely Turkic narrative styles have disappeared from the norm registers of Europeanized languages. The extensive chains of older Ottoman are considered “abusive” today (Deny 1921: 882). The only substitutes are series of finite sentences, juxtaposed or linked together by coordinative conjunctions. Such patterns have been reinforced under European influence. It is incompatible with genuine Turkic left-branching subordination to build progressive chains of nonmodifying, propulsive relative predications of the type *He worked for two hours/whereupon he went to town/where he met Mary/with whom he had lunch*. Such techniques are, in some Turkic languages, to a certain extent possible with imitations of Indo-European postpositive relative clauses: sentences preceded but not really introduced, by a connector such as *kim* or *ki*,⁴⁵ and signalling a close semantic connection with the subsequent predication. In many languages, however, for instance in modern Turkish, these imitations are in general not considered stylistically acceptable.

19. Developments at level 2

The development just discussed has also had consequences for level 2. Even here, chains are, as a rule, not used in modern Turkish. In the following sentence, a chain such as *bas-ıp/kay-ıp/düş-üp/kır-dı* would hardly be acceptable:

- (29) Turkish
Muz kabuğ-u üst-ün-e bas-ıp
 Banana peel-POSS.3.SG upper surface-POSS.3.SG-DAT step-CONV
kay-d-ı sonra tepetaklak düş-üp bacağı-n-ı
 slip-TRM.PAST.3.SG then on.his.head fall-CONV leg-POSS.3.SG-ACC
kır-d-ı.
 break-TRM.PAST.3.SG
 'He stepped on a banana peel and slipped, then fell on his head and broke his leg.'

Thus, the use is restricted to cases which are formally similar to those in which satellites, for instance, *-mca* clauses, occur. This might be regarded as the result of a satellitization process in the sense of restriction to the binary *modifier : modificatum* pattern. Whereas with the truly nonmodifying use of – for instance, in the old chain sentences – the content of clauses cannot be interrogated separately, this is possible in the reduced structures. In the following modern Turkish sentence, the converb clause is obviously used as a satellite.⁴⁶

- (30) Turkish
Otur-up mu konuş-t-ular?
 sit-CONV Q speak-TRM.PAST-3-PL
 'Did they speak (while they were) sitting?'

There even seems to be a tendency in certain Turkish registers towards representing sequences of equal events by means of coordinative structures. However, Wurm (1987: 4) certainly goes too far in his generalization to the effect that, due to Western influence, young urban speakers of modern Turkish make less use of , preferring, for example,

- (31) Turkish
Oda-ya gir-d-im ve otur-d-um.
 room-DAT enter-TRM.PAST-1.sg and sit-TRM.PAST-1.SG
 'I went into the room and sat down.'

to the traditional construction

- (32) Turkish
Oda-ya gir-ip otur-d-um.
 room-DAT enter-CONV sit-TRM.PAST-1.SG

A further interesting phenomenon which cannot be dealt with here is that, whereas the use of is reduced in the modern language, *-arak* has developed into a very frequent converb that even seems to be taking over the functional domains previously occupied by . In modern sentences such as the following, *-arak* exhibits a use which would even, in temporal terms, have to be characterized as “anterior sequential ordering”. We consider it an inherential-instrumental realization (“thus”, “doing so”) of the intraterminal value.⁴⁷

- (33) Turkish
Ayrılarak akşam köy-e gel-d-i-k.
 depart-CONV evening village-DAT come-TRM.PAST-1.PL
 ‘We left, and [so] arrived in the village in the evening.’

20. Stability of converbs

In some Turkic languages, as a result of long and strong contact influence, a further decline of nonmodifying terminal converbs can be observed (Johanson 1992: 363–364). Due to a high degree of Iranization, Kashghai, spoken in Southern Iran, has lost and all constructions typical of this converb (including the postverbal constructions of level 4), but instead copied Persian patterns. This has produced a remarkable parallelism with Persian syntax (Soper 1987: 401).

Iranian and Slavic contact influence has led to a general reduction of the use of converbs in some Turkic languages. In old literary languages such as Chaghatay and Ottoman, in modern standard languages such as Uzbek and Azerbaijani, as well as in all spoken nonstandard varieties influenced by Persian, converb clauses have to a certain extent been replaced by imitations of Indo-European adverbial (mostly temporal, purposive, and causal) clauses with free prepositive junctors (“connectives”). In some varieties, the use of converbs has diminished considerably. As for the situation in Afghanistan Uzbek, see Reichl (1983). In Khalaj, spoken in central Iran, converbs are, in accordance with Persian patterns, largely avoided (Doerfer 1988: 130).

In general, however, converb clauses have remained rather stable throughout the history of Turkic; and they still play a remarkably central syntactic role even in informal spoken registers. They have also proved to be rather attractive in language contact situations. Thus, Tajik, which belongs to the Iranian language group, has extensively copied Uzbek verb serialization patterns, basing them on a participial form (preterit stem plus *-a*), whose use as a converb is rather restricted in other varieties of New Persian (Perry 1979).

As a matter of fact, Turkic converbs and the techniques connected with them offer obvious advantages. From a psycholinguistic point of view, converb clauses seem to present few problems. Slobin (this volume) shows that *-ınca* and *-irken* are already used by two-year-old Turkish children and that *-ıp* is acquired somewhat later. (Compare Aksu-Koç–Slobin 1985.)⁴⁸ One advantage is the above-mentioned monofunctionality in the sense of unambiguous correspondences of form and function classes. Another reason is the surface structure of the converb clauses, which meets the requirements of the spoken language particularly well. Converb clauses are mostly very similar to “canonical” finite sentences, displaying nominative subjects and few if any specifics with respect to constituent order patterns.⁴⁹ Not until the end of the clause does the speaker have to decide whether to close it as a finite sentence or to nonfinitize it as a converb clause and let a base clause follow (Johanson 1975 b).⁵⁰ This explains the good correlation between the frequent use of clause-linking patterns based on converbs and verb-final word order (see König–van der Auwera 1990: 352).⁵¹ As a matter of fact, the head-final constituent order tends to be more rigid in converb clauses than in main clauses (cf. the “penthouse principle”, described by Ross 1973). Thus, it may be more than a coincidence that the recent constraints on just discussed are particularly heavy in modern Turkish, where a loosening of the verb-final order can be observed.

The tendency of head-final languages to use converbs for narrative purposes is, however, understandable only if we assume structures that are not necessarily modifying. Long series of prepositive converb clauses with extensive prefields – as common in non-Europeanized Turkic varieties – would be difficult to process if they were really satellites of their base clauses in a consistent way. The resulting heavy recursive determinations would be prohibitive for spontaneous speech. If, on the other hand, modification is not necessarily involved, new predications can be added continuously without much forward planning.

21. Possible paratactic origin

In view of the highly developed Turkic converb systems, it is even possible that some converbs that carry satellites today were once open with regard to [±mod] interpretation (modifying : nonmodifying). The text-building properties of certain converbs in many non-Europeanized texts – both popular narratives and elaborated literary products – support this impression. Given this situation, it may be natural to pose the speculative question whether the converb clause plus base clause junctions go back to series of main clauses, i.e., whether Turkic converb hypotaxis has developed from parataxis. This is possible, though by no

means empirically demonstrable. Turkic converb suffixes are postpositive elements, pointing forwards in the text and signalling a relationship to the subsequent predication. The oldest ones might have developed from particles which were originally placed between two neighboring predications. Compare the status, in some later Turkic languages, of the above-mentioned connectors *kim/kei*, which, as already pointed out, announce, but do not introduce a semantically closely connected following predication. Like other copied connectors (such as *ama* 'but'), they are not part of the second sentence, but prosodically joined to the end of the first one. The particles might later on have been reinterpreted as subjunctors marking the embedding of the first predication into the second one and forming a closing part of it, for instance, according to the patterns "E₁, [then] E₂" > "E₁-when, E₂". Note that several subordinated clause types in European languages have emerged in an analogous way, though with the difference that a forward-pointing element was taken to the second predication as a opening (introductory) subjunctor marking its embedding into the first predication. If our speculative assumption concerning the oldest Turkic converbs is true, no voluminous prefields would have existed originally, just chains of predications with progressively cataphoric marking.

Is this development supported by any morphological evidence? Are there indications that the oldest converb markers – such as <A> and , which are both very old units with reduced material shapes and without identifiable diachronic sources – could once function as sentence predictors? As pointed out, cases of transition between converb and other function classes are known even in historical times. In Old Turkic, <A> combines with *-r*, probably the remains of the copula *är* [...], to form the intraterminal so-called aorist, for instance, *ba:šla-yu-r* 'he leads' ('lead' plus <A> plus aorist; Johanson 1991 b [1976 b]: 141–146, cf. 1981: 14–16). Compare the combination of the element *sa* (< *sa*- 'reckon') with the aorist *-r* to form the Old Turkic conditional *-sa-r*. Some Turcologists suggest that was originally a sentence predictor. Kormušin, for instance, supposes that it belonged to the Common Altaic "perfects" and that its use as a converb was secondary (Kormušin 1984: 44, 1991: 38; cf. Johanson in press b). Several modern Turkic varieties display a finite use of , which might also, however, rather be regarded as the remnant of the periphrastic form + *turur* ('stands'). In any case, both <A> and might originally have been bare aspect stems that could also be used as sentence predictors. Compare, again, this situation with that of the thematic stem <SA>. In Chuvash, *-sa* corresponds functionally to , but in several Upper Chuvash dialects it can also be used – without any auxiliary verb or suffixes – as a postterminal past tense, for instance, *epě šir-sa* 'I have/had already written' (Benzing 1959: 743–744). According to Gabain, *-sar* clauses might originally have been "logically

dependent" main clauses ("formal unverknüpfte, aber logisch abhängige Hauptsätze", Gabain 1941: 187).

Khalaj, which displays many highly archaic features, uses *-di* as a functional equivalent of , for instance *al-di* ('take' -CONV) equivalent to common Turkic *al-ip*. This unit might be closely related to or even originally identical with the past tense in *-d* (e.g., *al-d-i* 'take'-TRM.PAST-3.SG). Doerfer remarks that, in spite of functional and accentual differences, such a connection should not be excluded ("trotz der Bedeutungsverschiedenheit und des verschiedenen Akzents sollte ein Zusammenhang mit dem Präteritum ... nicht ausgeschlossen werden", 1988: 133). In our view, the functional similarities are considerable, and the accent difference – for instance, according to Doerfer, past tense [a'l'di] vs. converb ['aldi] – quite expectable, since in varieties using both a converb and a past tense, these forms usually differ from each other with respect to prosodic features (see, for instance, Wurm 1945: 81, 88). The past marker *-d* is not likely to have been a verbal noun marker **-t*, as is sometimes claimed (see Johanson 1979: 42–43, 51), but might originally have been an aspect stem **d* assuming personal markers (possessive suffixes). The real problems of connecting the Khalaj converb with the past tense pertain to the phonetic nature of the dental segment. The converb suffix is more reminiscent of the second part of the Old Turkic suffix *-maDi[n]*, the negative equivalent of . This unit contains an element *-di* or *-ti*, which may be identical with a known petrified adverb suffix of the same shape. Pritsak assumes the existence of an Old Turkic converb in *-ti*, of which *-mati* would be the negative form (1961: 143).

22. Negation

With this last comment, we have arrived at the complex problems of negation. Already in Old Turkic, the negative converbs show interesting irregularities. The suffix *-ma* is generally used for negation, but there is no one-to-one-relationship of affirmative and negative forms. (On cases of suppletion, see Grønbech 1955.) Thus, Old Turkic *-maDi[n]* is generally regarded as the negative form of both <A> and . Its successors in later languages, *-may*, *-madan*, *-masdan*, etc., are generally modifying ('without doing', 'before doing', '[on account of] not doing' etc.).⁵² The opposition of <A> and appears to be neutralized.

In certain older and later languages, however, possesses a negative form of its own, for instance, Karakhanid *-mađip*, Turkish *-mayip*, Azerbaijani *-mayib*.⁵³ This allows for a [±mod] distinction between "E₁ not occurring, E₂ occurs" (or, expressed caritively, "without E₁ occurring, E₂ occurs") and "E₁ does not occur, E₂ occurs", for instance, in Turkish (Kissling 1960: 200):

- (34) Turkish
Selam ver-medem oda-dan çık-tım.
 greeting give-NEG.CONV room-ABL go.OUT-TRM.PAST-1.SG
 'Without greeting, I left the room.' [+mod]
- (35) Turkish
Selam ver-me-yip oda-dan çık-tım.
 greeting give-NEG.-CONV room-ABL go.OUT-TRM.PAST-1.SG
 'I did not greet, but left the room.' [-mod]

The infrequent use of negated forms in Turkish is, however, a further sign of the disappearance of nonmodifying subordinated clauses.

With respect to the scope of base clause negation, there are interesting diachronic developments, which have not been studied in detail yet. In older Turkic texts, converb clauses based on are outside the scope of a negation carried by its base clause; see Schulz's remark on Old Turkic: "im Gegensatz zum Osmanischen bewirkt eine negierende Verbalform der Basisfügung nicht, daß auch das vorangehende Konverbium auf -(°)p zu einem negierenden Konverbium wird" (1978: 128).

The later possibilities of extending the scope over the converb segment show considerable variation across the Turkic systems. At level 1, it seems to be generally excluded. Below level 2, on the other hand, the converb segment is always integrated in the scope. As for level 2, the converb clause is normally integrated in modern Turkish, for example:

- (36) Turkish
Ev-e gel-ip el-ler-in-i
 house-DAT come-CONV hand-PL-POSS.3.SG-ACC
yık-a-ma-d-ı.
 wash-NEG-TRM.PAST-3SG
 'He did not come home and [did not] wash his hands.'

This is, of course, not possible with modifying converb clauses, for example:

- (37) Turkish
Ev-e gel-ince el-ler-in-i
 house-DAT come-CONV hand-PL-POSS.3.SG-ACC
yık-a-ma-d-ı.
 wash-NEG-TRM.PAST-2SG
 'When he came home, he did not wash his hands.'

An integrative interpretation may be blocked by a particle such as *de* 'and; also', for instance: *Eve gelip de ellerini yıkamadı* 'He came home, and did not wash his

hands'. However, the scope of negation may be narrow even with clauses; the interpretation depends, according to Yüce, on "the context" ("geht aus dem Zusammenhang hervor"; 1973: 25):

- (38) Turkish
Ara-yıp bul-am-ıyor.
 search-CONV find-IMPOSSIB-PRES.3.SG
 'He is looking for it, [but] cannot find it.'

The rules for the application of wide and narrow scope of negation in the different Turkic languages have not been properly described so far. One of the many good reasons for starting on this task is that the integration of clauses within the scope of base clause negation is closely connected with the expulsion of from level 1.

Abbreviations

A ¹	first actant (i. e., "subject", whether "explicit" or "implicit"; see note 4)	LIM	temporal limitation
ABL	ablative (case)	LOC	locative (case)
ANT	anterior(ity)	NEC	necessitative
BS	base segment	[± MOD]	modifying : non-modifying
CS	converb segment	[+ MOD]	modifying
DAT	dative (case)	[- MOD]	non-modifying
DIR	directive (case)	○	(temporal) orientation point
E ₁	the first of two events expressed by neighboring clauses	POSSIB	possibility
E ₂	the second of two events expressed by neighboring clauses	POST	posterior(ity)
EQU	equative (case)	PST	postterminal(ity)
IMPOSSIB	impossibility	REC	reciprocal, reciprocity
INCL	temporal inclusion	TRM	terminal(ity)
INSTR	instrumental (case)	VN	verbal noun
INTR	intraterminal(ity)	⇒	modifies
		⇔	equal with respect to narrative value
		*	the relevant limit of an event (e. g., E ₁ *)

Notes

1. For traditional definitions of Turkic converbs and treatments of their use, see Johanson 1990 a: 200–202, 246–249.
2. The term *finite* is used here for predicate cores functioning as heads of independent sentences.
3. *Subordination* is used here in a purely constructional sense. In a subordinative construction xy , the members x and y hold different ranks in the sentence hierarchy, x being dependent upon y as the base (head) of the construction. In its syntactic behavior, xy is more similar to y than to x . Turkish xy -constructions are, e.g., *beyaz ev* ‘the white house’, *ekemeke ye-* ‘to eat bread’, *Ali geldi* ‘Ali has come’, *yavaş konuş-* ‘to speak slowly’. In this sense, the converb segment is constructionally carried by the base segment. Thus, a Turkish converb segment plus base segment construction such as *öğreterek öğren-* ‘to learn by teaching’ is, in its syntactic behavior, more similar to its base segment (*öğren-* ‘to learn’; superjunct) than to its converb segment (*öğret-erek* ‘by teaching’; subjunct). This concept of subordination does not include other independent criteria such as semantic restrictiveness (“modification”), position of the subjunct in relation to the superjunct, or capability of containing cataphoric pronouns and “zero-cataphors” (nonexpressed first actants coreferential with the subject of a following superjunct).
4. A^1 , the central actant in Turkic languages, is, according to rules that cannot be discussed here, realized as a *subject* (“explicit subject”), and/or as a *subject representative*, a suffixed person/number marker (“agreement”); or it is not realized overtly (“implicit subject”). See, e.g., Johanson 1990 c. Turkic languages are generally much less explicit with respect to first actant reference than modern standard average European languages are.
5. Imart 1981: 1599 uses the junction sign # between the two segments to mark what we refer to as level 2.
6. See section 8, on the terms postterminal and intraterminal.
7. On the formation of the aorist and the present tense in Turkish and Azerbaijani, see Johanson 1989.
8. *Adverbial* is used here for noncomplemental, nonadnominal segments in construction with other predicative segments. The semantic property of “modifying” is not part of the definition; see section 9. Like certain other adverbial elements, Turkic converbs may even appear within adjectival formations, e.g., Turkish *-ken-ki* in nominal groups such as *uyu-r-ken-ki resm-i* (sleep-CONV-ADJ picture-poss.3.sg) ‘the picture of him sleeping’; cf. *yann* ‘tomorrow’ + *-ki* = *yannki* ‘pertaining to tomorrow’.
9. By “prefield” is meant the area in front of the head of a clause (or another ‘domain’; cf. Dik 1989: 339).
10. Throughout this article, suffixes are cited in one allomorph only.
11. Instrumentality is a rather productive idea in Turkic converb formation, being expressed and renewed by different means (see Johanson 1988).
12. The sign ° symbolizes a possible (supposed) vowel segment of unknown quality and quantity.
13. Probably a so-called “aorist” participle, *-sa-r*, of the verbal stem *sa-* ‘reckon’. There are also combinations such as *-d-i ârsâr* (*-d* past + *âr-* ‘be’) + *-sar*.
14. For example, modern Turkish *-acak* is tri-functional, capable of marking all these predication types; see Csató (to appear).
15. Thus, *-a-rak*, otherwise a typical converb, is used adnominally in some Anatolian dialects. Yakut *-an*, the functional equivalent of *-p*, is not, however, likely to go back to the verbal noun in *-yan* (Poppe 1959: 682), but rather to the type *-uban* (*-p* + instrumental; with intervocalic loss of the labial; see Johanson 1988). Similarly, the Tuvan converb *-višan* is hardly etymologically related

- to the participle in *-miş* (and certainly not, as has been claimed, a combination of the participles in *-miş* and *-yan*), but ought to go back to a postverbal construction with *-p*.
16. The connectives developed from converb forms of individual verbs (section 3) are free from first actant control.
 17. Swift claims that the identification of the “performer” of the action of the subordinate clause “results from the meaning of the utterance and not from anything in the grammar”.
 18. According to Efremov (1980), most of the morphologically simple Yakut converbs are used in same first actant constructions only.
 19. We use *terminal* for nonintraterminal and nonpostterminal units, and reserve *adterminal* for marked units explicitly signalling the attainment (such as Russian perfectives).
 20. In Old Uighur, this intraterminality can be combined with the ideas of actional focality (*-a turur ärkän* ‘just doing’) and imminence (*-yal-ir ärkän* ‘being on the verge of doing’).
 21. The third known variety of the written language of the older period is Karakhanid (eleventh to twelfth centuries), written mainly in Arabic script. Major varieties of the written language of the “middle” period (“Middle Turkic”) are Khorezmian Turkic, Volga Bulgarian, Old Kipchak, Old Ottoman, and Early Chaghatay. The “newer” period (from the sixteenth century on) comprises varieties such as Middle and Late Ottoman, Late Chaghatay, and Volga Turki. The “modern” period is represented by standard languages such as Turkish, Azerbaijani, Gagauz, Turkmen, Tatar, Bashkir, Crimean Tatar, Kumyk, Karachay, Balkar, Nogay, Chuvash, Uzbek, Kazakh, Karakalpak, Kirghiz, New Uighur, Altay, Khakas, Tuvan, and Yakut, as well as by nonstandard varieties such as Dolgan, Khalaj, Kashghai, etc.
 22. Often forms of the type <GIN+ÇA> (*-yil[n]ča*, *-yanča*, etc.; Old Ottoman: *-inja[q]*, *-injayaz*). This type is also frequently used as a substitutive-comparative converb, expressing preference, etc. (“rather than”, “instead of”).
 23. Not even Turkish *-d-i mi* is preterital in the absolute, primarily deictic sense. For example, *akşam oldu mu* (evening become-TRM.PAST.3.SG Q) ‘once the evening has come’.
 24. <A+RQ> is found in Old Ottoman: *ara-yu-rağ gäl-d-i* (search-<A+RQ> come-TRM.PAST-3.SG) ‘[by] searching, he arrived’. Later on, it largely replaced the type <A> which, in modern Turkish, is used almost exclusively in a fully reduplicated form, e.g., *ara-ya ara-ya* (search-<A> search-<A>) ‘incessantly searching’. <RQ> is generally used as a comparative suffix, and other converbs with <RQ> in Turkic languages, e.g., Uzbek *-ib-râq*, have a meaning of ‘...ing somewhat [more]’. According to Mundy (1954: 15), Old Ottoman <RQ> may express “manner”.
 25. At low levels, the oppositions are often neutralized (Johanson 1990 b).
 26. Many Soviet Turcologists have stressed the beneficial effects of Russian syntactic influence on Turkic languages, particularly the copying of subordinative constructions with subordinating conjunctions (Comrie 1981: 34). Hanser seems inclined to consider the acquisition of European conjunctive structures an ideal ultimate goal for Turkic languages, the genuine morphosyntax of which is allegedly not very explicit and thus not very progressive (Hanser 1974: 156–161).
 27. Since terminals do not always express sequential ordering, and intraterminals do not always express nonsequentiality, these categories are, in temporalistic accounts, often claimed to be used “instead of” each other. A comprehensive account of the aspecto-temporal system of finite units in Turkish is given in Johanson (1994).
 28. As for verbal adverbs of this type, cf. Comrie’s remark that “often the most neutral English translation is just a coordinate construction” (1981: 82).
 29. See Foley–Van Valin 1984: chapter 6; cf. the discussion in Johanson 1975 a.
 30. It does not specify the kind of action talked about, but reduces the perspective on the action to an intraterminal one.
 31. Cf. Foley–Van Valin 1984: 220–223.

32. For instance, Old Turkic *-duŋta*, probably *-°ča*, Old Anatolian Turkish and Ottoman *-jjaq*, *-jjaŋaz*, Turkish *-ınca*, many languages in the northwest and southeast of the Turkic area <GČ> (*-yač*, *-yas*, *-j*) and expansions (e.g., Chuvash *-uśān*, Karaim *-qaŋox*), and Tuvan *-r...ya* (claimed by Bergel'son–Kibrik 1987: 31, however, to be devoid of aspecto-temporal meaning).
33. Guzev defines Turkic converbs globally as circumstantial forms of the verb (1990: 126). According to Hanser, expresses a "Begleitumstand" of temporal or modal character (1974: 165).
34. (17) from the Bilgä Qaghan inscription, (18) from the Suvarnaprabhāsa; cf. Tekin (1968: 243); Gabain (1941: 271) (with different transcriptions).
35. This is sometimes described, in temporalistic terms, as "neutralization of a relative tense".
36. This does not, however, mean that the event reported in an earlier clause is always presented as occurring earlier (cf. the discussion in Haiman 1985: 216).
37. Intraterminality (as signalled by Turkish *-iyor-d-*, *-arak*, French *imparfait*, etc.) can often be interpreted in terms of inherence, temporal inclusion, instrumentality, concomitance, etc. ("thus", "thereby", "therewith", etc.; Johanson 1971: 68–69, 255–259; 1975 a: 113–114).
38. Thus, in a sequence such as *-arak -ınca -d-*, converb segment *-arak* modifies base segment *-ınca*, whereas converb segment *-ınca* modifies base segment *-d-*.
39. Not, however, to the extent that a whole story is told in sentence-internal forms; cf. Scott (1978: 156–158).
40. Juldašev (1977: 179) translates: "Kogda my odelis', vzvalili na sebja meški i, poblagodariv ix, rasprostilis', oni pokazali nam dorogu, po kotoroj my pošli" ['When we had dressed, shouldered the bags and, having thanked them, said good-bye, they showed us the way to go].
41. In Tuvan, <GČ> is characteristic of level 2, whereas is restricted to lower constructions.
42. According to Bergel'son–Kibrik (1987), *-yaš* signals coreferentiality, but may expand into the field of *-r...ya*, which allegedly signals noncoreferentiality only.
43. This observation should by no means be understood as a claim about a declining use of converbs in general.
44. Level 1 seems to be more easily permitted when the base segment is a subjunct itself (see Csató, to appear).
45. The connector is not actually part of the sentences in question.
46. The converb segment type *-d-i mi* 'as soon as', 'once' (see note 23) is, although it contains the element *mi*, synchronically not a question any more.
47. Cf. note 37. See, e.g., Johanson (1975).
48. On the acquisition of Turkish converbs and their use for temporal reference, see Slobin (1988 and in this volume).
49. Certain other nonfinite clauses require a choice between a genitive and a nominative subject according to rules of communicative perspective (Johanson 1977; 1990 c).
50. Gabelentz 1901: 418: "Da hat man denn bis zum Aussprechen der Verbalform die Wahl, ob man den Satz schließen oder in den oder jenen Zusammenhang mit dem folgenden bringen will."
51. Thus, Amharic, which is not genetically related to Turkic and has had no close contacts with it, exhibits a very similar constituent order and corresponding patterns of converb subordination.
52. Cf. the negative-limitative *-mayin[ča]* 'as long as ... not'.
53. If negated forms exist in other languages, they are mostly used below level 2, for instance, Uzbek *-ma-b* (Kononov 1960: 241).

References

- Aksu-Koç, Ayhan A.—Dan I. Slobin
1985 "The acquisition of Turkish", in: Dan I. Slobin (ed.), 839–880.
- Barulin, A. N. (ed.)
1987 *Novoe v zarubežnoj lingvistike, 19. Problemy sovremennoj tjurkologii*. [New trends in foreign linguistics, 19. Problems of modern Turcology.] Moscow: Progress.
- Bechert, Johannes—Giuliano Bernini—Claude Buridant (eds.)
1990 *Toward a typology of European languages*. (Empirical Approaches to Language Typology 8.) Berlin—New York: Mouton de Gruyter.
- Benzing, Johannes
1959 "Das Tschuwaschische", in: Jean Deny—Kaare Grønbech—Helmuth Scheel—Zeki Velidi Togan (eds.), 695–751.
- Bergel'son, Mira B.—A. A. Kibrik
1987 "Sistema pereključenija referencii v tuvinskom jazyke" [The switch reference system in Tuvan], *Sovetskaja Tjurkologija* 2: 16–32; 4: 30–45.
- Bickel, Balthasar
1991 *Typologische Grundlagen der Satzverketzung: Ein Beitrag zur allgemeinen Grammatik der Satzverbindung und des Fährtenlegens*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich 9.) Zürich: Universität Zürich.
- Brendemoen, Bernt (ed.)
1990 *Altaica Osloensia*. Oslo: Universitetsforlaget.
- Clyne, Paul R.—William F. Hanks—Carol L. Hofbauer (eds.)
1979 *The elements: A parasession on linguistic units and levels, April 20–21, 1979, including papers from the Conference on non-Slavic languages of the USSR, April 18, 1979*. Chicago: Chicago Linguistic Society.
- Comrie, Bernard
1981 *The languages of the Soviet Union*. Cambridge: Cambridge University Press.
- Corum, Claudia—Cedric Smith—Stark—Ann Weiser (eds.)
1973 *You take the high node and I'll take the low node*. Papers from the Comparative Syntax Festival. Chicago: Chicago Linguistic Society.
- Csató, Éva Ágnes
to appear "Explaining constraints on converb clauses in Turkish".
- Csató, Éva Ágnes—Lars Johanson
1993 "On gerundial syntax in Turkic", *Acta Orientalia* (Budapest) 46: 133–141.
- Deny, Jean
1921 *Grammaire de la langue turque (dialecte osmanli)*. Paris: Leroux.
- Deny, Jean—Kaare Grønbech—Helmuth Scheel—Zeki Velidi Togan (eds.)
1959 *Philologiae turcae fundamenta* 1. Aquis Mattiacis: F. Steiner.
- Dik, Simon C.
1989 *The theory of functional grammar* 1. The structure of the clause. (Functional Grammar series 9.) Dordrecht—Providence: Foris.
- Doerfer, Gerhard
1988 *Grammatik des Chaldasch*. (Turcologica 4.) Wiesbaden: Otto Harrassowitz.
- Džanmavov, Jusup Džangišiev
1967 *Deepričastija v kumyjskom literaturnom jazyke (sравnitel'no s drugimi tjurkskimi jazykami)*. [Converbs in the Kumyk literary language (in comparison with other Turkic languages)] Moscow: Nauka.

Efremov, Nikolaj Nikolaevič

- 1980 *Složnopolodčinnnye predloženiya vremeni v jakutskom jazyke*. [Complex temporal sentences in Yakut] Moscow: Nauka.

Foley, William A.

- 1986 *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.

Foley, William A.—Robert D. Van Valin, Jr

- 1984 *Functional syntax and universal grammar*. (Cambridge Studies in Linguistics 38.) Cambridge: Cambridge University Press.

Gabain, Annemarie von

- 1941 *Altürkische Grammatik*. (Porta linguarum orientalium 23.) Leipzig: Otto Harrassowitz.

Gabelentz, Georg von der

- 1901 *Die Sprachwissenschaft: ihre Aufgaben, Methoden und bisherigen Ergebnisse*. (2nd edition.) Leipzig: Tauchnitz.

Grønbech, Kaare

- 1955 "Bemerkungen über das alttürkische Verbum", *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 105: *69–*70.

Guzev, Viktor Grigor'evič

- 1990 *Očerki po teorii tjurkskogo slovoizmenenija: glagol (na materiale staroanatolijskogo-tjurkskogo jazyka)*. [Outlines of a theory of Turkic inflection on the basis of materials from Old Anatolian Turkic] Leningrad: Izdatel'stvo Leningradskogo Universiteta.

Haiman, John

- 1985 *Natural syntax*. (Cambridge Studies in Linguistics 44.) Cambridge: Cambridge University Press.

Hanser, Oskar

- 1974 "Türkischer Satzbau. Die Nebensatzgrammatik des Türkischen, untersucht an ausgewählten Beispielen", *Wiener Zeitschrift für die Kunde des Morgenlandes* 65–66: 55–218.

Hazai, György (ed.)

- 1990 *Handbuch der türkischen Sprachwissenschaft* 1. Wiesbaden: Otto Harrassowitz.

Imart, Guy

- 1981 *Le kirghiz (turk d'Asie Centrale soviétique). Description d'une langue de littérarisation récente*. 2 vols. Aix-en-Provence: Publications de l'Université de Provence.

Johanson, Lars

- 1971 *Aspekt im Türkischen. Vorstudien zu einer Beschreibung des türkeitürkischen Aspektsystems*. (Acta Universitatis Upsaliensis: Studia Turcica Upsaliensia 1.) Uppsala: Almqvist & Wiksell.
- 1975a "Some remarks on Turkic 'hypotaxis'", *Ural-Altaische Jahrbücher* 47: 104–118. [Reprinted in Johanson 1991 a: 210–224.]
- 1975b "Fiilimsi önermelerin görevleri üzerine" [On the functions of converb clauses], in: *I. Türk Dili Bilimel Kurultayına sunulan bildiriler 1972*. Ankara: Türk Dil Kurumu, 525–529.
- 1976a "Zum Präsens der nordwestlichen und mittelasiatischen Türk Sprachen", *Acta Orientalia* (Copenhagen) 37: 57–74. [Reprinted in Johanson 1991 a: 99–116.]
- 1976b "Das tschuwaschische Aoristthema", *Orientalia Suecana* 23–24/1974–1975: 106–158. [Reprinted in Johanson 1991 a: 117–169.]
- 1977 "Bestimmtheit und Mitteilungsperspektive im türkischen Satz", *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, Supplement III: 2: 1186–1203. [Reprinted in Johanson

- 1991 a: 225–242. Translation: “Opredelennost’ i aktual’noe členenie v tureckom jazyke”, in: A. N. Barulin (ed.), 398–425.]
- 1979 *Alttürkisch als ‘dissimilierende Sprache’*. (Abhandlungen der Akademie der Wissenschaften und der Literatur, Mainz, Geistes- und sozialwissenschaftliche Klasse, 1979: 3.) Wiesbaden: Steiner.
- 1981 *Pluralsuffixe im Südwesttürkischen*. (Abhandlungen der Akademie der Wissenschaften und der Literatur, Mainz, Geistes- und sozialwissenschaftliche Klasse, 1981: 9.) Wiesbaden: Steiner.
- 1988 “On the renewal and reinterpretation of ‘instrumental’ gerunds in Turkic”, *Oriens* 31, 136–153.
- 1989 “Aorist and present tense in West Oghuz Turkic”, *Journal of Turkic Studies* 13: 99–105.
- 1990 a “Studien zur türkeitürkischen Grammatik”, in: György Hazai (ed.), 146–278.
- 1990 b “Zur Postterminalität türkischer syndetischer Gerundien”, *Ural-Altaische Jahrbücher*, Neue Folge 9: 137–151.
- 1990 c “Subjektlose Sätze im Türkischen”, in: Bernt Brendemoen (ed.), 193–218.
- 1991 a *Linguistische Beiträge zur Gesamturkologie*. (Bibliotheca Orientalis Hungarica 37.) Budapest: Akadémiai Kiadó.
- 1991 b “Zur Typologie türkischer Gerundialsätze”, in: *Türk Dilleri Araştırmaları 1991*, Ankara, 98–110.
- 1992 a *Strukturelle Faktoren in türkischen Sprachkontakten*. (Sitzungsberichte der Wissenschaftlichen Gesellschaft an der J. W. Goethe-Universität Frankfurt am Main, 29:5.) Stuttgart: Franz Steiner Verlag.
- 1992 b “Periodische Kettensätze im Türkischen”, *Wiener Zeitschrift für die Kunde des Morgenlandes* 80: 201–211.
- 1994 “Türkeitürkische Aspektotempora”, in: Rolf Thieroff–Joachim Ballweg (eds.), 247–266.
- in press a “Ein türkisches Erzählsatzmuster”, to appear in: *Gedenkeband G. Reuschel*, Leipzig.
- in press b “Altaische Postterminalia”, paper given at the 31st Session of the Permanent International Altaistic Conference, Weimar 1988, to appear in *Acta Orientalia*, Budapest.
- Juldašev, A. A.
1977 *Sootnešenie deepričastnyx i ličnyx form glagola v tjurkeskix jazykax*. [The interrelation of converbal and personal forms of the verb in the Turkic languages] Moscow: Nauka.
- Kissling, Hans-Joachim
1960 *Osmanisch-türkische Grammatik*. (Porta linguarum orientalium, Neue Serie 3.) Wiesbaden: Otto Harrassowitz.
- Koç, Sabri (ed.)
1988 *Studies on Turkish linguistics*. Ankara: Middle East Technical University.
- König, Ekkehard–Johan van der Auwera
1990 “Adverbial participles, gerunds and absolute constructions in the languages of Europe”, in: Johannes Bechert–Giuliano Bernini–Claude Buridant (eds.), 337–355.
- Kononov, Andrej Nikolaevič
1960 *Grammatika sovremennogo uzbekeskogo literaturnogo jazyka*. [Grammar of modern literary Uzbek] Moscow–Leningrad: Izdatel’stvo Akademii Nauk SSSR.
- Kormušin, Igor Valentinovič
1984 *Sistemy vremen glagola v altaiskix jazykax*. [The system of verbal tenses in the Altaic languages] Moscow: Nauka.

- 1991 *Problemy rekonstrukcii prattjurkского glagola: temporal' naja sistema, ee istoki i preobrazovanija*. [Problems of reconstruction of the Proto-Turkic verb: the tense system, its sources and transformations] Moscow 1991: Akademija Nauk SSSR, Institut jazykoznanija. [Unpublished lecture manuscript.]
- Mundy, C. S.
1954 "The -E/-Ü gerund in Old Ottoman. 1. Formal analysis", *Bulletin of the School of Oriental and African Languages* 16: 298–319.
- Perry, John
1979 "Uzbek influence on Tajik syntax: The converb constructions", in: Paul R. Clyne–William F. Hanks–Carol L. Hofbauer (eds.), 448–461.
- Poppe, Nikolaus
1959 "Das Jakutische", in: Jean Deny–Kaare Grønbech–Helmuth Scheel–Zeki Velidi Togan (eds.), 671–684.
- Pritsak, Ormeljan
1961 "Die Herkunft der Allophone und Allomorphe im Türkischen. Ein Beitrag zur türkischen Morphologie", *Ural-Altäische Jahrbücher* 33: 142–145.
- Reichl, Karl
1983 "Syntactic interference in Afghan Uzbek", *Anthropos* 78: 481–500.
- Ross, John R.
1973 "The penthouse principle and the order of constituents", in: Claudia Corum–Cedric Smith-Stark–Ann Weiser (eds.), 397–422.
- Schulz, Peter
1978 *Verbalnomina und Konverbien als adverbiale Ergänzungen im Alttürkischen*. [Ph. D. dissertation, University of Giessen.]
- Scott, Graham
1978 *The Fore language of Papua New Guinea*. (Pacific Linguistics, series B, 47.) Canberra: Australian National University.
- Slobin, Dan I. (ed.)
1985 *The crosslinguistic study of language acquisition. Volume 2: Theoretical issues*. Hillsdale, NJ: Lawrence Erlbaum.
1988 "The development of clause chaining in Turkish child language", in: Sabri Koç (ed.), 27–54.
- Soper, John David
1987 *Loan syntax in Turkic and Iranian: The verb systems of Tajik, Uzbek, and Qashqay*. [Ph. D. dissertation, University of California, Los Angeles.]
- Swift, Lloyd B.
1963 *A reference grammar of modern Turkish*. (Uralic and Altaic series 19.) Bloomington–The Hague: Indiana University Publications.
- Šamina, Ljudmila Alekseevna
1987 *Vremennye polipredikativnye konstrukcii tuvinskogo jazyka*. [Temporal multipredicative constructions of the Tuvan language] Novosibirsk: Nauka, Sibirskoe otdelenie.
- Tekin, Talât
1968 *A grammar of Orkhon Turkic*. (Uralic and Altaic series 69.) Bloomington–The Hague: Indiana University Publications.
- Thieroff, Rolf–Joachim Ballweg (eds.)
1994 *Tense systems in European languages*. Tübingen: Niemeyer.

Wurm, Stefan

- 1945 *Der  zbekische Dialekt von Andidschan. Phonetische und morphologische Studien, Texte 1.* (Akademie der Wissenschaften in Wien. Philosophisch-historische Klasse. Sitzungsberichte 224.3.) Br nn–M nchen–Wien: Rudolf M. Rohrer [on commission].

Wurm, Stephen A.

- 1987 “ volution de la langue et d clin culturel”, *Diogen * 137: 35–48.

Y ce, Nuri

- 1973 *Gerundien im T rkischen. Eine morphologische und syntaktische Untersuchung.* [Ph. D. dissertation, University of Mainz.]

Converbs in Turkish child language: The grammaticalization of event coherence¹

Dan I. Slobin

1. Introduction

Turkish, as a typical OV language, makes use of clause-chaining constructions in which one or more nonfinite clauses are followed by a finite clause. For example, the most ancient and widespread clause-chaining form in the Turkic languages is some version of *-ip*, as in the following Old Turkish example (Gabain 1950):

- (1) *äſit-ip* *uq-ar* *biz*
 hear-CONVERB understand-PRES we
 ‘we hear and (then) understand’

Such a form is commonly referred to as a *converb*, *gerund*, or *deverbal adverb* in Western European and American grammars of Turkish, *deepričastie* in Russian, and *ulaç* in Turkish. I will refer to such forms as *converbs*, in accord with the useful attempt of the editors of this volume to achieve terminological clarity. Converbs are derived from verbs and carry out functions of adverbial linking or conjoining between clauses. Since absolute tense is carried only by the main clause in such constructions, the conjunct clause indicates relative tense with regard to the main clause. As Johanna Nichols has pointed out (1983: 246): “The basic opposition in all converb systems is *simultaneous* vs. *anterior* ...: a simultaneous converb can be translated ‘while VERB-ing’, an anterior one ‘having VERB-ed’.”

In this paper I examine the four most frequent converbs in Turkish (shown in Table 1) and propose that more than temporality is involved in their use – when they are considered in their discourse contexts and in terms of their acquisitional histories. All four forms are frequent in both speech and writing, yet one of them is mastered much later than the others. This one is also the most recent to have entered the language. These are clues to the special characteristics of that form. I suggest that it functions to frame a global event in narrative and that this is a distinct sort of cognitive function.

2. Converbs in Turkish child speech

The present study is part of a larger, crosslinguistic investigation of the development of temporality in narrative, designed in collaboration with Ruth Berman of Tel Aviv University, and carried out in Turkey, Israel, the United States, Germany, and Spain (Berman–Slobin 1994). The method consists of asking speakers to tell a story on the basis of a picture book, *Frog, where are you?* (Mayer 1969), that presents a story without words. Stories were gathered in Istanbul from children of ages three, four, five, seven, and nine; and from adults. The action centers on a boy whose pet frog has escaped. The boy and his dog go searching for the frog in a forest, encountering various animals and undergoing a series of adventures before finally finding the frog. The plot is full of causal and temporal sequences, surprises, and switches of attention between the overlapping endeavors of the boy and the dog. This makes it fertile ground for the use of various clause-chaining devices.

Table 1 presents rough meanings of the four converbs studied, along with some statistics. The important point of Table 1 is that all four are well represented in speech directed to children as well as in children's own speech. I will refer to the four converbs – which have varying forms, according to vowel harmony – as *-ince*, *-erken*, *-ip*, and *-erek*.² *-Ince* and *-erken* indicate succession and simultaneity, respectively, and allow for either same or different subject in the two clauses. *-ip* and *-erek* allow only same subject. Of these, *-ip* is the most neutral converb, serving as a simple coordinator; *-erek* is the form calling for detailed examination in this study. The columns of Table 1 give relative frequencies of the four converbs in three kinds of texts. The first is a sample of Turkish books written for preschool children; the second is a sample of ten adult narrations of the “frog story”; and the third is a sample of 30 child narrations of the same story, summarizing across ages three, five, and nine, with ten narrators in each group. Although individual frequencies of the converbs vary with the type of text, it is evident that children both hear and use all four forms; therefore different patterns of acquisition and use cannot be attributed to simple frequency of occurrence.

A developmental analysis of use of the four converbs presents a rather different picture from the overall pattern shown in Table 1. Table 2 shows the percentage of narrators at each age level who make use of a given converb at least once to appropriately connect two clauses.³ It is striking that *-ince*, *-erken*, and *-ip* appear as early as age three, and increase by age four, while *-erek* is not appropriately used by a single narrator younger than seven. (There are a few inappropriate uses by four- and five-year-olds, examined below; and no uses at all by three-year-olds.) This is the central question of the study: Why is *-erek*

Table 1. Relative frequencies (percentages) of converbs in texts

Converb	Meaning	Children's books	Adult narratives	Child narratives
<i>X-ince Y</i>	'when X, Y' 'as soon as X, Y'	9	18	23
<i>X-erken Y</i>	'while X-ing, Y'	23	30	27
<i>X-ip Y</i>	'X and (then) Y' 'having X-ed, Y'	38	40	27
<i>X-erek Y</i>	'(in, by) X-ing, Y'	30	12	22

Table 2. Percentage of narrators appropriately using converb at least once

Age	Sample size	<i>-ince</i>	<i>-erken</i>	<i>-ip</i>	<i>-erek</i>
Three	15	7	20	13	0
Four	13	23	46	54	0
Five	27	33	44	59	0
Seven	16	31	69	56	25
Nine	22	50	68	55	32
Adult	12	42	92	92	58

Table 3. Number of children using converb at least once

Age	Sample size	<i>-ince</i>	<i>-erken</i>	<i>-ip</i>	<i>-erek</i>
Two	13	2	4	0	0
Three	18	3	5	3	1
Four	13	3	4	3	0

frequent in speech directed to children, yet virtually lacking in their own speech throughout the preschool period?

These figures can be compared to the use of converbs in the spontaneous speech of even younger children, beginning with age 2;0. (Ages are given as *years; months*.) These are samples from an earlier study of 44 children between the ages of 2;0 and 4;8 (Slobin 1982). The samples, of about a half-hour each, were recorded in semi-structured interaction with a native-speaking female investigator in Istanbul. Opportunities for clause chaining were rare, unless the child happened to volunteer a brief narrative or description of a temporal or causal sequence. Table 3 summarizes the occurrences of converbs in these samples. The developmental pattern of the frog stories seems to be supported in

these spontaneous speech samples. *-İp*, which increases fourfold between ages three and four in the frog stories, is not used by any two-year-old; *-erek* is used only once in the entire sample of 44 preschoolers. It is used in this instance to express manner of action, which – as proposed below – is probably the least complex of its varied functions. The investigator is urging a girl of age 3;0 to be quick in retrieving a toy from her room, so that they can read a story. The child responds:

- (2) *Geliyorum, çabuk yürüyerek gideceğim.* [age three]
 come:PRES:1SG quick walk-EREK go:FU:1SG
 'I'm coming, quickly walking I'll go.'

The only converbs used by two-year-olds are *-ince* and *-erken*, suggesting that the meanings of these forms may be most accessible on cognitive grounds. The following section examines attempts to specify such meanings.

3. Meanings of the Converbs

3.1. *-Ince* and *-erken*

Of the four converbs considered here, the meanings of *-ince* and *-erken* are most clearly specialized for temporal linkage. Their temporal meanings are quite straightforward, and are adequately and succinctly characterized in Turkish grammars.

3.1.1. *-Ince*

Underhill (1976: 381) defines *-ince* as “‘as soon as’, or, with less urgency, ‘when’”; and Lewis (1967: 179) refines the temporal relation as “action just prior to that of the main verb.” The first event in an *-ince* linkage must have a right temporal boundary; the second event can be bounded or unbounded, without affecting the reading of the temporal relation between the two events. There are no coreference restrictions between the two clauses. The only possible interpretation is that the onset of the second coincides with the end of the first event. The following three examples from the frog stories are indicative of the range of possible uses of *-ince*. (Age of narrator is given in square brackets.)

- (3) Situation: a dog falls from a window with a glass jar on his head, breaking the jar; sequenced, plotline events with different subjects; second event is PUNCTUAL.
Köpek düş-ünce başındaki şişe kırılıyor. [adult]
 dog fall-İNCE head:POSS:LOC.REL jar break:PASS:PRES
 ‘When the dog falls the jar on his head breaks.’

- (4) Situation: a beehive falls from a tree and breaks and the bees chase a dog; sequenced, plotline events with different subjects; second event is INCEPTIVE, UNBOUNDED DURATIVE.

Arılar kovan bozul-unca köpeği izlemeye
 bee:PL hive break:PASS-INCE dog:ACC follow:INF:DAT
başlıyorlar. [adult]
 start:PRES:PL

'When the beehive breaks the bees start to follow the dog.'

- (5) Situation: a boy wakes up to find that his frog has escaped; sequenced, plotline events with same subject; second event is UNBOUNDED DURATIVE.

Çocuk sabah kalk-inca kurbağayı arıyor. [age 9]
 boy morning get.up-INCE frog:ACC search:PRES

'When the boy gets up in the morning he searches for the frog.'

Although *-ince* presents the first event as in some way subsidiary to the second, the events in both clauses can advance the plot. This is especially clear in (3), which presents two sequenced events in a cause-effect relation. Thus *-ince* cannot be simply interpreted as a narrative backgrounding device (Hopper 1979). Nor is it necessarily a causal connective. Rather, given the close temporal relation between the two events, the event of the conjunct clause presents a state of affairs which has some causal, or at least enabling relation to the event of the main clause. Kononov (1956: 481) attempts a purely temporal definition, characterizing the main-verb event as one that "follows immediately, but without connection" to the preceding event marked by *-ince*. In support of this position, he cites a number of examples such as (6), in which the *-ince* clause simply moves a participant onto a new scene or into a new phase of activity.

- (6) *Kahveden çık-inca yağmurun altında sokaklarda dolaştı.*
 cafe:ABL leave-INCE rain:GEN under:LOC street:PL:LOC stroll:PAST
 'Leaving the cafe he strolled in the streets in the rain.'

However, even in such examples of negligible physical causality, it is clear that the conjunct clause sets up a condition in which the main clause can be realized. That is, the narrator has some reason for linking these two situations with *-ince*. From the listener's point of view, it seems that *-ince*, with its narrowly temporal meaning, licenses a minimal set of inferences about the speaker's communicative purpose in syntactically linking the two clauses. I suggest that the four converbs lie on a cline with regard to the range of inferences that they license, with *-ince* and *-erken* fairly limited by comparison with *-ip* and *-erek*.

Developmentally, the basic temporal meaning of *-ince* is accessible to the youngest narrators. For example a three-year-old, having established that the dog has fallen from the window, says:

- (7) *Ondan sonra düş-ünce kırılıyor.* [age three]
 it:ABL after fall-INCE break:PASS:PRES
 'After that, when (he) falls (it) gets broken.'

3.1.2. *-Erken*

The meaning of *-erken* is simple temporal overlap or simultaneity. The first event in an *-erken* linkage must be durative and unbounded, and there is no restriction on the temporal contour of the second event. The only interpretation is that the second event is temporally contained in the first, without any regard to relations between either left or right boundaries of the two events. Like *-ince*, there are no coreference restrictions between the two clauses. The following examples from three-year-old frog stories show the range of possible uses of *-erken*, as well as the precocious use of this form in child speech.

- (8) Situation: a boy is sleeping and a frog sneaks out of its jar; background state and simultaneous event with different subjects; second event is BOUNDED PUNCTUAL.
Çocuk uy-erken kurbağa kaçmış. [age three]
 boy sleep-ERKEN frog escape:NARR.PAST
 'While the boy was sleeping, the frog escaped.'
- (9) Situation: a deer carries a boy on its antlers and a dog runs alongside; simultaneous plotline events with different subjects; second event is UNBOUNDED DURATIVE.
Geyik onu taş-ırken kaçıyor. [age three]
 deer PRO.3SG:ACC carry-ERKEN run.away:PRES
 'While the deer is carrying him, the dog is running away.'
- (10) Situation: same as (3); same subject; postposed background state; main event is BOUNDED PUNCTUAL.
Köpek düşmüs aşağıya camdan bak-erken. [age three]
 dog fall:NARR.PAST downwards window:ABL
 look-ERKEN
 'The dog fell downwards while looking out of the window.'

Note that *-erken*-clauses, like *-ince*-clauses, can present either background or plot-advancing (foreground) information. In narratives with several coacting partici-

pants, as the frog story, two participants can act simultaneously to advance the plot, as in (9).

3.1.3. Developmental considerations

-ince and *-erken* perform clearly temporal functions which can be defined quite simply and directly. Aside from specifying the temporal relation between the events of the two clauses, these converbs place no restrictions on the form or content of the main clause with regard to tense, aspect, modality, or the identities of predicate arguments. As soon as the requisite temporal notions of sequence and simultaneity are available, the direct mapping of these notions onto *-ince* and *-erken* should provide no problem. As shown in Table 3, these forms are used as early as age two in spontaneous speech.

In terms of narrative organization, *-ince* and *-erken* mark a purely local or temporally adjacent relation between two actions, without necessarily knitting them together into a larger conceptual entity. As proposed below, it is this conceptual ability that seems to play a major role in the acquisition of *-ip* and *-erek*.

Comparisons with children's frog stories in other languages reveal a similar early ability to mark the temporal relations that are expressed in Turkish by *-ince* and *-erken*, reinforcing the proposal that these notions are readily accessible to children of this age. For example, English- and German-speaking three- and four-year-olds often mark the second clause for inception or sudden onset in a way that parallels the use of *-ince* to indicate tight temporal sequence:

- (11) Situation: a boy and dog fall in a river.
And then he splashed right in and then they started swimming. [age four]
- (12) *Und dann ruft der Junge in so ein Loch und da kommt*
 and then calls the boy into such a hole and then comes
plötzlich ein Hamster raus.
 suddenly a hamster out
 'And then the boy calls into a sort of hole and then suddenly a
 hamster comes out.'

Simultaneity is marked by *when* by English three-years-olds, parallel to *-erken* by Turkish children of the same age, as shown in (13), which is equivalent to (8).

- (13) *The frog got out when he's sleeping.* [age three]

3.2. *-ip* and *-erek*

The development of *-ip* and *-erek* is not so straightforward, because these forms are more varied and discourse-sensitive in their functions.

3.2.1. *-İp*

-İp is the most “neutral” or “empty” of the converbs, corresponding to a general conjunction such as English *and*. Consequently, some grammarians, like Underhill (1976: 379), simply say: “this suffix has little meaning of its own”; going on to note only that “the two actions are either performed simultaneously ... or, more frequently, performed in sequence.” Other grammarians, such as Kononov (1956: 474), propose an open-ended range of meanings, describing *-ip* as “expressing an action ... that precedes another action, characterizing the predicate from the point of view of manner of action, time, reason, or condition.” Clearly, what is at play is the range of contextually framed inferences that can be drawn between two or more syntactically linked events. What distinguishes both *-ip* and *-erek* from the first two converbs is the significant presence of the factor of inference in their interpretation. Grammarians who attempt to provide strictly temporal definitions fail, since these converbs, unlike *-ince* and *-erken*, are not inherently temporal, but draw their interpretations as simultaneous or successive linkages from context. On the other hand, grammarians who attempt to assign richer semantic meanings of cause or manner, fail for similar reasons.

Underhill is quite right in declining to assign a meaning to *-ip*. This converb has been present throughout the documented history of the Turkic languages, and perhaps is so long-lived because of its neutrality. Its etymology seems to be unknown, although Kuznecov (1983) has proposed that – fittingly – it may be derived from an ancient verb *ba* meaning ‘tie together, conjoin’.

In the frog stories, *-ip* makes its major appearance when children begin to link clauses together in narrative units, rather than mere temporal juxtaposition. The timing of its emergence suggests that it does not simply function as a conjunction, but rather serves a narrative function. Like *-ince* and *-erken*, the clauses chained by *-ip* “package” pieces of an event into a larger event, but without the immediacy of temporal relation indicated by those converbs. The events either have a kind of separateness, as in (14), or the event of the *-ip*-clause is a concomitant manner of action, even postposed as a subsidiary comment, as in (15).

- (14) Situation: a boy climbs onto a rock in order to call for his frog.

Çık-ıp taşın üzerine bağırryor. [age five]

climb-IP rock:GEN top:POSS:DAT call:PRES

‘(He) climbs onto the rock and (then) calls.’

- (15) Situation: a boy is lying on the ground, looking up at an owl in a tree.

Çocuk seyrediyor başını çık-ıp (=çıkartıp). [age five]

child look:PRES head:POSS:ACC lift-IP

‘The child looks, lifting his head.’

-İp seems to mark one event as, in some sense, backgrounded – or at least somewhat subsidiary to another in a narrative context.

At first glance, *-erek* would seem to perform a similar function. However, a closer examination of its discourse-semantic functions may account for its absence in the preschool data.

3.2.2. *-Erek*

As an introduction to the functions of *-erek*, compare (16) and (17), which present the same situation from two slightly differing perspectives, as suggested by the English glosses:

- (16) *Gül-İp gitti.*
 laugh-İP GO:PAST
 'He laughed and went away.'

- (17) *Gül-erek gitti.*
 laugh-EREK GO:PAST
 'He went away laughing.'

The essential difference seems to be that *-İp* links two events, while *-erek* presents two situations (actions, states) as part of one event. However, beyond that, if *-İp* can be designated as a relatively empty, all-purpose coordinator, *-erek* requires a more subtle characterization, since it is much more limited with regard to the clauses that it can link. It is this subtlety, I suggest, that eludes five-year-olds, and, to a great extent, has eluded grammarians.

Table 4 presents an overview of a number of attempts to define *-erek* over the past century.

The definitions that restrict *-erek* to simultaneity are clearly wrong (Redhouse, Jansky, Kissling), as shown by Deny's example of a "preliminary action" marked by *-erek* (*Kedi eti kaparak kaçtı* 'Seizing the meat, the cat ran away'). Ediskun's "simultaneity or sequence," however, is too broad. Kononov, Lewis, and Underhill appropriately limit the sequential reading to "immediately preceding" or "slightly prior" to the event of the main verb. But such definitions are purely temporal, and so leave no grounds for distinguishing *-erek* from the simultaneity of *-erken* and the immediate succession of *-ince*. If only temporality were at issue, we would expect *-erek* to freely substitute for *-erken* and *-ince* – but it does not. The reason that it does not is hinted at by the various nuances in some of the definitions: "manner," "mode of action," "condition, contingency," "picturesque qualities," "inner connection between the principal and subsidiary actions." This range of groping attempts to characterize the nature of the "inner connection" (Kissling) between the two predicates suggests that, like *-İp*, a meaning cannot be assigned to the converb itself, but rather, we are in need of a characterization

Table 4. Accounts of *erek* by grammarians

Redhouse (1884: 111): The “distinctive use [of *-erek*] is to indicate that, of two contemporary sustained actions expressed, the one, subsidiary, accompanies the other.”

Deny (1921: 888): *-Erek* expresses an “extended concordant state.” It can express simultaneity: *Bana bakarak güliyordu* ‘Looking at me, he smiled’; manner: *Ağlıyarak geldi* ‘He came crying’; or “a secondary action [that] is preliminary to the principal action”: *Kedi eti kaparak kaçtı* ‘Seizing the meat, the cat ran away’.

Jansky (1954: 136): *-İp* is used “when the action of the main verb follows that of the converb in time, whereas the converb in *-erek* is used when both actions – that of the converb and the main verb – ensue simultaneously.”

Kononov (1956: 477): *-Erek* expresses an extended circumstance of the mode or manner of action: (1) an action occurring simultaneously with the main predicate, with nuances of iterativity, momentaneity; or designation of the time of action; or presentation of a uniform, ongoing activity; (2) an action immediately preceding the action presented in the main predicate. (In this function the *-erek* converb is grammatically synonymous with the *-ip* converb, with the distinction that *-erek* primarily characterizes an action from the point of view of mode of action [*obraz dejstvija*], while *-ip* expresses mode of action, time, reason, and condition.)

Kissling (1960: 192): “*-Erek* is used to designate a subsidiary action that is absolutely simultaneous with the principal action, whereby there is often an inner connection [*ein innerer Zusammenhang*] between the principal and subsidiary actions.”

Ediskun (1963: 252): *-Erek* “(1) specifies the temporal relation to the following action, (2) refines the temporal extent relating a following action with respect to simultaneity or sequence, (3) can indicate a condition or contingency [*sartf*]: *Hasta dinlenerek iyileşti* ‘The patient recovered (by means of) resting’.”

Lewis (1967: 177): *-Erek* “denotes a single act or continued activity contemporaneous with or slightly prior to the main verb. ... It often corresponds to the English ‘by doing’ or ‘with doing’ ...”

Yüce (1973: 18–19): The *-erek*-clause “mainly gives the mode and manner [*Art und Weise*] of the event of the main clause and unfolds simultaneously with it. ... When the action of the subordinate clause does not give the mode and manner of the event of the main clause, then it generally precedes the main clause event in time.”

Underhill (1976: 379–380): *-Erek* “is used for a single action, or one that is described as a single action, which takes place at the same time as the main verb or immediately preceding. ... This suffix is frequently used to indicate the manner in which the action of the main verb is performed.”

Ivanov (1977: 76) “To the extent that the verbal adverb *-arak* has the ability to take on a colorful [*красочное*, ‘pictorial’] [*картинное*] expression of the accompanying action, it can be used in all circumstances ... in which one wishes to accentuate the ‘picturesque qualities’ [*живописност*] of the subsidiary action, along with the fact that it is not semantically blended or merged with the main action.”

of the types of situations framed by *-erek* and the sorts of inferences that are licensed by use of this form.

One intriguing solution – relying on aspectual meaning – has been offered by Johanson (1971). He observes that *-erek* partakes of meanings of the past progressive *-lyordu*, while *-ip* relates to the simple past *-DI*. Thus, (16) *gülüp gitti* ‘laugh-IP go-PAST’ implies the sequentiality of *güldü (ve) gitti* ‘laugh-PAST (and) go-PAST’ (i. e., ‘He laughed (and) went away’); while (17) *gülerek gitti* corresponds to *Gitti. Güliüyordu*. ‘He went away. He was laughing [in so doing].’ Johanson concludes:

The function of *-erek* and *-lyordu* is to expressly turn off the principle of order (often suggested by *-ip* and *-di*), with resulting possible interpretations of ‘simultaneity’, ‘subsidiary condition’, ‘commentary’, ‘instrument’, ‘reason’, ‘motivation’, etc. Without going into the details of the use of *-ip* and *-erek*, we can ascertain that this use is not temporal, but is basically aspectual. (Johanson 1971: 261).

This suggestion certainly goes beyond the grammarians represented in Table 4, and the aspectual interpretation is useful for the further analysis below; but it seems dissatisfying to characterize the function of one grammatical form as simply “turning off” the functions of a contrasting form. If this were the only issue, we should expect five-year-olds to use both forms. There must be something about “the details of the use of *-ip* and *-erek*” that account for its relatively late acquisition.

Johanson’s attention to the inherent aspect of the subsidiary clause suggests that one should also consider the *Aktionsart* of the main clause. This factor reveals that *-erek* is involved in building global event representations, rather than simply linking two clauses. Taking a more broadly cognitive approach, both the meanings and the inherent aspects of the two clauses are involved in arriving at an appropriate inference of the overall meaning of the clause chain. Compare (18 a) and (18 b):

- (18) a. *Hasta dinlen-erek iyileşti.* (Ediskun 1963)
 patient rest-EREK recover:PAST
 ‘The patient recovered (by) resting.’
 b. *Askerler şarkı söyley-erek kışlaya yürüdüler.* (Jansky 1954)
 soldier:PL song sing-EREK barracks:DAT march:PAST:PL
 ‘The soldiers marched singing to the barracks.’

Both “rest-recover” and “sing-march” seem to form plausible events, the one causative/instrumental and the other accompanying activity/manner. Both have the general temporal meaning of “overlap,” but this meaning does not derive from “turning off the principle of order.” Rather, inherent temporal qualities of the event presented by the second verb influence the interpretation of the con-

nection between the two verbs. In (18a) the second clause is inchoative (or perhaps “graded onset”); that is, one knows that the recovery was not present as the onset of the resting. In (18b), however, both clauses are simply durative, and presumably totally overlap in time. Given the lexical meaning of “recover” (entry into a new state), it follows that “sing-EREK” should have an instrumental reading in (19):

- (19) *Hasta şarkı söyley-erek iyileşti.*
 patient song sing-EREK recover:PAST
 ‘The patient recovered (by) singing.’

However, if the temporal meaning of the second verb is “unbounded,” the reading is temporal overlap:

- (20) *Hasta şarkı söyley-erek oturdu.*
 patient song sing-EREK sit-PAST
 ‘The patient sat singing/sat and sang.’

Thus the interpretation of an *-erek*-chain depends not only on the inherent progressive meaning of the converb, but also on the *Aktionsart* of the main-clause verb, along with its lexical meaning.

3.2.3. *-Erek and serial-verb constructions*

-Erek-chains often suggest potential compound verbs, reminiscent of serial verb constructions in other types of languages. One can easily imagine compounds like “rest-recover” or “sing-march.” In conceptual terms, such constructions require an ability to link two or more phases of a situation into a single event. It is this cognitive ability to mark two actions as constituent parts of a superordinate, event – without actually naming that event – that seems to be beyond the ability of five-year-olds.

In their “functional reference grammar” of Mandarin Chinese, Li and Thompson characterize such constructions in precisely these terms (1981: 594):

... the property they all share is that the verb phrases in the serial verb construction always refer to events or states of affairs which are understood to be related as parts of one overall event or state of affairs. The exact way in which they are related varies according to the meanings of the verbs in these verb phrases.

In their classification of serial-verb constructions, Li and Thompson speak of three kinds of relations which can broadly be used to classify all of the *-erek*-chains in the frog stories: CONSECUTIVE, PURPOSE, and CIRCUMSTANCE. Examples from the school-age and adult narratives are given in Table 5, with the Li and Thompson definitions and my own subcategories.

Table 5. *-Erek*-chains in frog stories

CONSECUTIVE: "One event occurs after the other."

Preparatory act/Movement

'He *shut-EREK* his eyes *slept*.' [age nine]

'The boy *climb-EREK* tree *was looking* in hole.' [age nine]

Motivating state

'The boy *get angry-EREK* *picks up* dog.' [age seven]

'The deer *get nervous-EREK* *started to run* wildly.' [age nine]

Cause

'The owl *chase-EREK* the boy *frightened* him.' [age nine]

'The dog *fall-EREK* from the window *broke* the jar.' [adult]

PURPOSE: "The first event is done for the purpose of achieving the second."

'The boy *bring-EREK* his hands to his mouth *was trying to silence* the dog.' [age seven]

'The frog *leave-EREK* the jar *ran away*.' [age nine]

CIRCUMSTANCE: "The first verb describes the circumstances under which the event in the second verb phrase or clause occurs."

Manner

'*Swim-EREK* they *went back*.' [age seven]

'The dog quickly *run-EREK* alongside *passed*.' [adult]

Interlaced acts

'The boy *approach-EREK* a log *says* "sh" to the dog.' [age nine]

'*Wave-EREK* his hand he *goes*.' [age nine]

First consider the CONSECUTIVE uses. What they have in common is a slightly retrospective view of a preliminary event phase that, in combination with the main-clause event, constitutes a whole. The preliminary phase in some sense enables the subsequent phase – as a preparation, motivating state, or cause. These constructions can generally be rendered in English by a *having-done* construction, e.g., *Having climbed the tree, he was looking in a hole*.

The PURPOSE uses define an act in the *-erek*-clause and give its goal in the main clause. These can be rendered in English by an *in-doing* construction, e.g., *In bringing his hands to his mouth, the boy was trying to silence the dog*. Here there is little or no sense of sequentiality between the two phases of the global event.

The uses of *-erek*-chains to describe circumstances can represent either simultaneous or successive components of an event. The descriptions of manner are, of necessity, simultaneous, and can be rendered in English by present participles,

e. g., *They went back swimming*, or by verbs that conflate motion and manner, e. g., *They swam back*. As discussed below, manner descriptions seem to be the developmental starting point of *-erek* for children.

The final category, which I have labeled INTERLACED ACTS, is the most heterogeneous. Here the narrator, by the use of *-erek* rather than another converb, chooses to present two phases of an event as tightly linked. These uses correspond to English present participles, e. g. *Waving his hand he goes off (in the distance)*. These uses can most easily be substituted by *-ip*, depending on narrative perspective.

Treating these constructions in a serial-verb framework fills in the grammarians' "inner connection" or "pictorial expression" with somewhat more cognitive detail. At this level of detail, the functions of *-erek* are different from those of the other three converbs. That is, the issue is not one of temporality, but rather the creation of some sort of conceptual amalgam. The contrasts between the forms become clear when one considers the compatibility of the other converbs with *-erek*-chains in the frog stories. (This comparison can only be carried out with regard to conjuncts with the same subject, since this constraint applies to *-erek*.)

3.2.4. Comparison of *-erek* and *-ince*

With one exception, none of the verbs chained by *-erek* are chained by *-ince* in the collection of frog stories. *-Ince* linkages are not at all like compound verbs or serial-verb constructions. Rather, given the completive aspectual meaning of this converb, the two conjuncts present clearly separate events. The only seeming exception is "fall-break," describing a scene in which the dog falls from the window with a jar stuck on his head, breaking the jar. But the use of *-ince*, as shown in (21), switches reference and requires a passive form of the main verb, thereby emphasizing a conceptual gap between the two events, rather than depicting them as phases of the same event, as in the *-erek*-chain in (22), describing the same scene.

- (21) *Köpek düş-ünce başındaki şişe kırılıyor.* [adult]
 dog fall-İNCE head:POSS:LOC.REL jar break:PASS:PRES
 'When the dog falls the jar on his head breaks.'

- (22) *Köpek pencereden aşağı düş-erek kavanozu kırıyor.* [adult]
 dog window:ABL down fall-EREK jar:ACC break:PRES
 'The dog, falling down from the window, breaks the jar.'

3.2.5. Comparison of *-erek* and *-erken*

None of the verbs chained by *-erek* are chained by *-erken* either. *-Erken*-linkages are also not at all like compound verbs or serial-verb constructions. As shown

earlier in examples (8–10), *-erken* either backgrounds a state to a simultaneously ongoing activity or presents the overlapping actions of two actors.

3.2.6. Comparison of *-erek* and *-ip*

As might be expected, the only converb that overlaps functionally with *-erek* is *-ip*, given its openness to many contextual interpretations. Example (23) shows the compatibility of *-ip* the with “fall-break” scene:

- (23) O da düş-*ip* kavanozu kırıyor. [adult]
 PRO.3SG FOCUS fall-IP jar:ACC break:PRES
 ‘He [dog] falls and breaks the jar.’

Such constructions seem to emphasize sequence, rather than package the two events into a larger whole. Example (23) translates more naturally as *he falls and then breaks the jar*, while the corresponding conjunct chain with *-erek* (22) is close to *having fallen, he breaks the jar*.

Overall, there are only six scenes that, broadly, allow of both *-erek* and *-ip* expression in the frog story texts, as shown in (24):

- (24) Verbs conjoined by either *-erek* or *-ip*:
 fall-break
 leave-escape
 take leave-depart
 take-act [various actions]
 lean on-call
 say-go

A number of other *-ip*-chains seem to be built on a first clause that is completive or bounded with respect to the second, but in many cases it seems to be the narrator’s choice to bind event descriptions more or less tightly into a global event, allowing for contrasts such as the various versions of the “fall-break” scene that we have seen.

It is clear, therefore, that the meanings of *-ip* and *-erek* cannot be determined simply by the semantic contents of the two clauses. The contrast represents a choice in narrative perspective – and it is precisely this kind of narrative ability that develops sometime after age five. It is of interest that the narrative perspective provided by *-erek* has evolved recently in historical time as well. The other three converbs have long histories in the Turkic languages, and are widespread across their range from Central Asia to the Balkans. But *-erek* has developed primarily in Asia Minor, in the Oghuz languages, making its first appearance in Anatolian manuscripts of the thirteenth to fifteenth centuries. Deny noted in 1921 (1921: 890): “it is only recently that the use of the *-(y)erek* gerundive has

undergone a great extension. Today it has taken over all the terrain lost by the *-(y)ip* gerundive." Unfortunately, Deny does not say more, and I haven't found any other mention of the discourse contexts of the spread of *-erek* in the extensive Turkish, American, Western European, or Soviet Turcological literature.

While we do not have the means to trace out this historical extension, it is suggestive to compare *-ip*-chains in five-year-old frog stories with *-erek*-chains in the stories of older children and adults. In both instances, *-erek* takes over functions previously marked by *-ip*.

4. Considerations of child language development

4.1. Event representation

A close look at five-year-olds' uses of *-ip* reveals anticipation of *-erek* functions. These children begin to use *-ip*-chains to mark the first conjunct as expressing a preparatory state or action to that of the main verb, or to express an activity or posture that is part of the action of the main verb. Note, for example, the following correspondence:

- (25) a. *Yavruyu al-ip ona bakıyorlar.* [age five]
 baby.[frog]:ACC take-IP PRO.3SG:DAT look:PRES:PL
 'They take a baby frog and look at it.'/'Having taken ...'
- b. *Bir tanesini eline al-arak onu sevdi.* [age nine]
 one item:POSS:ACC hand:POSS:DAT take-EREK PRO.3SG:ACC
 love:PAST
 'Taking one of them [baby frog] in his hand, he loved it.'

Thus there is some suggestive evidence in the narrative data that, developmentally, *-erek* takes over some of the terrain of *-ip*.

More generally, this process can be seen as part of the development of narrative abilities in children. In order to construct *-erek*-chains, the narrator must attend to two or more phases of an event. This ability emerges – cross-linguistically – at about age five in our texts (Berman–Slobin 1994). For example, in describing the frog's escape from its jar, three-year-olds are content to comment simply on the fact of his leaving, using a single clause with the verb *çık* 'exit'. However, nine-year-olds and adults break the scene into phases, and chain them as conjuncts with *-ip* or *-erek* plus *kaç* 'escape': *çıkıp kaç* or *çıkarak kaç*. Five-year-olds, in both Turkish and English, break the scene into phases, but do not yet join them syntactically, as shown in (26).

- (26) Turkish five-year-olds:
Kurbağa kapığı açıyor çıkıyor yavaş yavaş.
 frog door:ACC open:PRES exit:PRES slow slow
 'The frog opens the door, goes out slowly slowly.'
Kurbağa dışarı çıkmış kaçmış.
 frog outside exit:NARR.PAST run.away:NARR.PAST
 'The frog went outside, ran away.'
 English 5-year-old:
The frog got out of his bowl, and he went somewhere else.

Syntactic packaging, then, reflects more than simple increase in memory or attention, since five-year-olds can analyze scenes and present their analysis in successive clauses. Furthermore, they are beginning to make flexible use of Turkish clause-chaining devices to knit some components of situations together into longer units. Thus they have the prerequisites for use of *-erek*, but something is missing.

-Erek is difficult because, although it appears to link clauses on a temporal basis, its distinguishing characteristic really lies in its role in building global or composite event representations. If it were simply a temporal subordinator, it would be acquired along with *-ince* and *-erek*; if it simply contrasted with *-ip* on features of aspect or sequentiality, it would be acquired along with *-ip*. *-Erek* is also difficult because it requires a flexibility in narrative perspective – a narrative stance in which attention can be shifted from the microstructure to the macrostructure of events.

4.2. Children's errors in use of *-erek*

Children's errors in the use of *-erek* reveal the special dimensions of difficulty of this form. Children's speech errors are vanishingly rare in Turkish. The regular and semantically transparent agglutinative morphology of the language makes Turkish a noteworthy exception in the field of child language acquisition (Aksu-Koç-Slobin 1985). Therefore it is especially interesting that the very few errors to be found in the narrative texts occur in the use of *-erek*. The fact that some of these errors are produced by nine-year-olds suggests that this form is especially troublesome. Since *-erek*-chains are syntactically identical to those formed with the other converbs, the difficulties must lie elsewhere than in their formal grammar.

Although *-ince* and *-erken* have no coreference restrictions, *-erek* and *-ip* require same subject in conjunct and main clause. The formal error in (27) is a subject switch between boy and owl:

- (27) O da [çocuk] ağaca tırmandığında bir delik gör-erek
 PRO.3SG FOCUS tree:DAT climb:NOML:LOC one hole see-EREK
 bir baykuş çıkıyor oradan. [age nine]
 one owl exit:PRES there:ABL
 'When he [boy] climbs the tree, seeing a hole, an owl comes out
 of there.'

More deeply, however, the child has not used *-erek* properly to knit together two phases of a single event. The appropriate converb would be *-ince*, indicating the conceptual rupture between the two events. Perhaps nine-year-olds are still working on the type of event that can be framed by *-erek*. While one cannot make much of this one error, it suggests a problem in the managing of coreference, which also appears in the some of the rare attempts by younger children to use *-erek*.

The only other nine-year-old error in the use of *-erek* is not ungrammatical, but is an infelicity in narrative organization. The *-erek*-clause must always be backgrounded, in some sense, to the main clause ("subsidiary," "preparatory," etc.). In the following example the child is describing a picture in which a boy climbs a tree, thinking that his frog is hidden in a hole. Note the syntax of the preceding English sentence: the adverbial phrase "thinking ..." gives the background motivation to the main event, "climbing." In example (28) the narrator has reversed this relation:

- (28) Çocuk ağaca çık-arak kurbağanın bir deliğe saklanmış
 child tree:DAT climb-EREK frog:GEN one hole:DAT hidden
 olduğunu sandı. [age nine]
 be:NOML:POSS:ACC think:PAST
 'Climbing a tree, the boy thought the frog was hidden in a hole.'

Clearly, more is involved in learning the use of *-erek* than restrictions of aspect, reference, and the semantics of phases of events. This converb is, essentially, a narrative form, and its proper use requires an ability to manage attention flow in narrative.

In spite of these two errors, the overall use of *-erek* by our nine-year-old narrators is not markedly different from that of adults, and seven-year-olds are fairly similar. (The only significant development is in longer chains, often using several different converbs, creating even larger unitary event complexes in narrative.)⁴

There is a small bit of evidence that younger children interpret *-erek* simply as a marker of temporality and/or manner. One suggestive error from Aksu-Koç's unpublished data is a six-year-old's description of a picture of a reclining cat, given in (29).

- (29) **yat-arak pisipisi* (= *yat-an pisipisi*)
 lie-EREK pussycat lie-PRES.PART pussycat)

The child has used *-erek* in place of the present participle, *-an*. In an abstract sense, both forms have a continuative or durative meaning. Following the suggestion made above that *-ince* and *-erek* are easily acquired because they directly map temporal categories, this error may reflect a later attempt to do the same with *-erek*. Note that both present participle and converb can co-occur in parents' descriptions of events to very young children, as in the following example of a mother's speech to a child of 2;0. (And note, also, that both forms can be conveyed by *-ing* in English.)

- (30) *Bak, yat-an inek var. Yat-arak yemeğini yiyor.*
 look, lie-PRES.PART COW EXIS. lie-EREK food:POSS:ACC eat:PRES
 'Look, there's cow lying.down. It's eating lying.down.'

Our limited data suggest that children begin to learn *-erek* in descriptive contexts of simultaneous activity, indicating either temporal overlap or manner, as in (30), and as in (2), our only spontaneous preschool example of *-erek*: *yürüyerek gideceğim* 'I'll go runningly'. There are only two instances of *-erek* in preschool frog stories, and they are both postposed manner adverbials rather than interclausal connectives: 'the boy brings the bees, shout-EREK' and 'he had lain down in bed this way, turn-EREK backwards'. Children's eventual task is to move away from such semantic interpretations to the event-building and discourse uses that characterize the full use of the converb.

5. Switch reference

The error in (27), along with several seven-year-old errors, suggest that *-erek* may also pose problems in the domain of switch reference. Recall that *-ip* and *-erek* require same subject in conjunct and main clause, while *-ince* and *-erken* are open in this regard. Considered within a crosslinguistic framework of switch-reference systems, the pattern for *-ip*, *-ince*, and *-erken* seems to match a universal for same subject (SS) and different subject (DS) marker. For example, Haiman and Munro (1983: xiv), following a suggestion by Longacre (1983), propose that, diachronically, "SS markers originate as temporal successive markers; DS markers originate as temporal overlap markers." In Turkish, *-ip* is primarily a successive marker, and is SS. *-Erken* is exclusively an overlap marker, and *-ince* marks at least a minimal overlap between the end of one action and the beginning of another. These two overlap markers can be either SS or DS. The Turkish pattern is consistent with Haiman and Munro's predicated universal (1983: xiv):

[T]here will be no language in which simultaneous marking can ever be interpreted as SS exclusively; and no language in which sequential marking can be interpreted as DS exclusively.

-Erek, however, does not fit nearly into this universal formulation. When its interpretation is succession, it is, appropriately, SS; therefore, as predicted, it is a sequential marking that cannot be interpreted as DS exclusively. However, when its interpretation is overlap, *-erek* is still, exclusively, SS. Perhaps, then, it is only illusory that *-erek* can express true sequence. If it is seen, rather, as linking two phases of a single event, it falls outside of the temporal framework of sequence vs. simultaneity, and therefore does not violate Haiman and Munro's proposed universal. If children are prone, however, to interpret such connectives as essentially temporal in meaning, they will make errors such as (27), and will face some additional overall difficulty in assigning the converb to its proper function.

6. Conclusion

As a methodological conclusion, this analysis suggests that unusual lags in acquisition such as that noted for *-erek* can provide useful suggestions for points of complexity in a language. The *-erek* case is especially clear, in that there is a contrasting set of converbs that are equivalent in syntactic form and general frequency of use. The case is also intriguing in that there appears to be a diachronic parallel to the late emergence of *-erek*.

In terms of cognitive linguistics, the case of *-erek* points to the roles of both conceptual and discourse factors in fully accounting for the functions of grammatical forms. An adequate semantic analysis of *-erek* reveals that this form is used to relate two phases of a situation (sequential or simultaneous) in the construction of a coherent event. Such an event notion is a complex category which is neither fully temporal nor causal in traditional terms, but partakes of both temporality and causality within a narrative context. Parallels with semantic descriptions of serial-verb constructions suggest that there are universal factors of cognitive organization underlying the grammaticalization of biclausal constructions.

Abbreviations

1SG	first person singular	NARR	narrative
3SG	third person singular	NOML	nominal
ABL	ablative	PART	participle
ACC	accusative	PASS	passive
DAT	dative	PL	plural
EXIS	existential	POSS	possessive
FU	future	PRES	present
GEN	genitive	PRO	pronoun
INF	infinitive	REL	relative
LOC	locative		

Notes

1. The study reported here was designed in collaboration with Ruth A. Berman; Turkish data were gathered by Ayhan Aksu-Koç and Aylin Küntay, who also provided valuable feedback on the analysis. Support was provided by the Grant Foundation, the National Science Foundation, the Sloan Foundation, the U.S.-Israel-Binational Science Foundation, the Center for Middle East Studies (University of California, Berkeley), the Max-Planck-Institut für Psycholinguistik (Nijmegen, Netherlands), and Boğaziçi University (Istanbul, Turkey). An earlier version of this paper appeared as Slobin (1988).
2. Turkish has two vowel harmony patterns: *-ince* and *-ip* follow fourfold harmony of fronting and rounding (*-ince/-ınca/-ünce/-unca*); *-ereke* follows twofold harmony of unrounded fronting (*-ereke/-arake*). What I refer to as *-erken* is an invariable suffix *-ken* added to the “aorist” (timeless, habitual) inflection *-ir-ken/-ır-ken/-ür-ken/-ur-ken*. This suffix can also be added to other forms, but only occurs with the aorist in the present data.
3. This table combines data from the studies by Aksu-Koç and Küntay; Table 1 presents data from the Aksu-Koç study only.
4. The use of multiple converbs of various types to build more complex event representations would be an important next step in the study of converbs. Adult narrators, for example, produce such combinations as the following:

- (1) *Çocuk kork-up içeri, aşağı düş-erken köpeğe de hızla*
 boy be.afraid-IP inside, downwards fall-ERKEN dog FOCUS quickly
yanından koş-arak geçmiş, çünkü düşürdüğü an
 side:ABL run-EREK PASS:NARR.PAST because fall:CAUSE:NOML:POSS bee
kovanındaki bütün arılar köpeğin peşindeymiş.
 hive:GEN:LOC.REL all bee:PL dog:GEN trail:POSS:LOC:NARR.PAST
 ‘The boy being afraid, falling down, the dog passed quickly by, running, because
 all of the bees from the hive that he knocked down were after the dog.’

- (ii) *Pencereden dışarı bak-erken de köpek pencereden aşağı
window:ABL outwards look-ERKEN FOCUS dog window:ABL downwards
düş-erek kavanozu kırıyor.
fall-ERKEN jar:ACC break:PRES
'Looking out of the window, the dog, falling down from the window, breaks
the jar.'*
- (iii) *Kurbağasını al-ıp çocuk, anne, baba, ve diğer kardeş kurbağalara
frog:POSS:ACC take-IP boy, mother, father, and other sibling frog:PL:DAT
el sallay-arak suyun içinden yürüy-erek uzaklaşmışlar.
hand wave-EREK water:GEN interior:POSS:ABL walk-EREK go.away:NARR.PAST:PL
'Taking his frog, the boy, waving to the mother, father, and other brother-and-
sister frogs, walking through the water, they [boy and dog] go away.'*

References

- Aksu-Koç, Ayhan A.—Dan I. Slobin
1985 "The acquisition of Turkish", in: Dan I. Slobin (ed.), 839–880.
- Berman, Ruth A.—Dan I. Slobin
1994 *Different ways of relating events in narrative: A crosslinguistic developmental study*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Deny, J.
1921 *Grammaire de la langue turque (dialect osmanli)*. Paris: Presses Universitaires de France.
- Ediskun, H.
1963 *Yeni türk dilbilgisi* [New Turkish grammar]. Istanbul: Remzi Kitabevi.
- Gabain, A. von
1950 *Alttürkische Grammatik*. Leipzig: Otto Harrassowitz.
- Haiman, John—Munro, Pamela (eds.)
1983 *Switch-reference and universal grammar*. Amsterdam: John Benjamins.
- Ivanov, S. I.
1977 *Kurs turekoj grammatiki: Čast' 2. Grammatičeskie kategorii glagola* [A course in Turkish grammar: Part 2. The grammatical categories of the verb]. Leningrad: Izdatel'stvo Leningradskogo Universiteta.
- Jansky, H.
1954 *Lehrbuch der türkischen Sprache*. (2nd edition.) Wiesbaden: Otto Harrassowitz.
- Johanson, Lars
1971 *Aspect im Türkischen: Vorstudien zu einer Beschreibung des türkeitürkischen Aspektsystems*. (Acta Universitatis Upsaliensis, Studia Turcica Upsaliensia 1.) Uppsala: Almqvist and Wiksell.
- Kissling, H. J.
1960 *Osmanisch-türkische Grammatik*. Wiesbaden: Otto Harrassowitz.
- Kononov, A. N.
1956 *Grammatika sovremennogo tureckogo literaturnogo jazyka* [Grammar of modern standard Turkish]. Leningrad: Izdatel'stvo Akademii Nauk SSSR.

- Koç, Sabri (ed.)
1988 *Studies on Turkish linguistics*. Ankara: Middle East Technical University.
- Kuznecov, P. I.
1983 "Semantika i rekonstrukcija tjurkskogo deepričastija na $-(^{\circ})b$, $-(^{\circ})p$, $-j(^{\circ})p$ -..." [Semantics and the reconstruction of the Turkic converb in $-(^{\circ})b$, $-(^{\circ})p$, $-j(^{\circ})p$], *Sovetskaja tjurkologija*, No. 1.
- Lewis, G. L.
1967 *Turkish grammar*. London: Oxford University Press.
- Li, Charles N.-Sandra A. Thompson
1981 *Mandarin Chinese: A functional reference grammar*. Berkeley: University of California Press.
- Longacre, Ronald E.
1983 "Switch-reference systems in two distinct linguistic areas: Wajokeso (Papua New Guinea) and Guanano (Northern South America)", in: John Haiman-Pamela Munro (eds.), 185-208.
- Nichols, Johanna
1983 "Switch-reference in the Northeast Caucasus", in: John Haiman-Pamela Munro (eds.), 245-266.
- Redhouse, J. W.
1884 *A simplified grammar of the Ottoman Turkish language*. London: Trübner.
- Serebrennikov, B. A.-Gadžieva, N. Z.
1979 *Sravnitel'no-istoričeskaja grammatika tjurkskix jazykov* Baku: Maarif.
- Slobin, Dan I.
1982 "Universal and particular in the acquisition of language", in: Eric Wanner-Lila R. Gleitman (eds.), 128-173.
1985 (ed.) *The crosslinguistic study of language acquisition. Volume 1: The data*. Hillsdale, NJ: Lawrence Erlbaum Associates.
1988 "The development of clause chaining in Turkish child language", in Sabri Koç (ed.), 27-54.
- Underhill, Robert
1976 *Turkish grammar*. Cambridge, MA: MIT Press.
- Wanner, Eric-Lila R. Gleitman (eds.)
1982 *Language acquisition: The state of the art*. Cambridge: Cambridge University Press.
- Yüce, N.
1973 *Gerundien im Türkischen: Eine morphologische und syntaktische Untersuchung*. [Unpublished dissertation, Johannes-Gutenberg-Universität, Mainz.]

The system of switch-reference in Tuva: Converbal and masdar-case forms*

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1. Preliminaries

Switch-reference is a morphosyntactic mechanism that marks, (usually) on the verb, the identity or nonidentity of the subject of a clause with the subject of another clause. As the simplest example of a verbal form marking the identity of subjects we can mention English adverbial participles as in *Having finished my homework, I went to sleep*. Adverbial participial clauses usually have a zero subject that is coreferential with the subject of the main clause.¹ The situation with Russian converbs (*deepričastija*) is similar. When the condition of coreferentiality is violated, the result are ill-formed sentences like (1), used ironically by Chekhov:

- (1) *Pod" ezž-a-ja k stancyi i gljad-ja na prirodu v okno,*
arrive-CONV to station and look-CONV on nature in window
s menja sletela šljapa.
from me flew.off hat
'Arriving at the station and looking at nature through the window,
my hat flew away.'

Thus, the converb suffix *-ja* is a marker of coreference between the subjects of two clauses in Russian.² In more elaborate systems of switch-reference not only markers of coreference (usually termed same-subject markers) but also markers of noncoreference (different-subject markers) are found. For examples, in An-cash Quechua (Quechuan, South America) there are markers designating co-reference and noncoreference of the subject of the dependent clause and the subject of the main clause (Cole 1983: 3):

- (2) a. *chakra-chaw urya-shpa, pallamu-rqu-u wayta-kuna-ta.*
field-in work-ss pick-PAST-1 flower-PL-ACC
'While I worked in the field, I picked flowers.'
b. *chakra-chaw urya-pti-i, María pallamu-rqu-n wayta-kuna-ta.*
field-in work-DS-1 María pick-PAST-3 flower-PL-ACC
'While I worked in the field, María picked flowers.'

As we will show below, one of such systems is amply represented in Tuva, a Turkic language of southern Siberia.

1.1. The history of the issue and typological remarks

The term “switch-reference” was coined by Jacobsen (1967) with respect to some North American Indian languages. In the course of the typological studies in the 1970s and 1980s it became clear that phenomena of switch-reference are by no means exotic and are found in many languages of the world. Furthermore, it turned out that switch-reference is one of the most common means of local cohesion in discourse (see, e.g., Foley–Van Valin 1984: 322–323). Systems of switch-reference are widely attested in the languages of North America (Jacobsen 1983), South America (Cole 1983), Australia (Austin 1981), New Guinea (Longacre 1983; Lynch 1983), and Africa (Wiesemann 1987). Thus, the least documented area in this respect is Eurasia. We are aware of just a few publications on switch-reference in Eurasia that make use of this notion. They mostly concern languages of eastern and southern Asia—Manchu-Tungusic languages (Nichols 1979), Nivkh (V. Nedjalkov in this volume), Japanese (Myhill–Hibiya 1988, Iwasaki 1992: chapter 4), and Tibeto-Burman (Genetti 1990); see also section 1.2 below on the description of switch-reference phenomena in Asia in different terms, and the discussion of another area of Eurasia in Nichols (1983).

Typological studies in switch-reference are found in the collections of Munro (1980), Haiman–Munro (1983) and a number of more recent works (such as the collections Haiman–Thompson (1988), Austin (1988), where the theory and typology of switch-reference were developed in more detail.³

The following universal (or at least near-universal) generalizations can be made on the basis of the available cross-linguistic data on switch-reference (cf. also Haiman–Munro 1983).

1. The clause containing the switch-reference markers is dependent on the other clause (with whose subject the subject of the dependent clause is compared with respect to coreference). The degree of this dependence can vary, but some degree of dependence must be present. A higher degree of dependence is expressed as the lack of marking the dependent verb form for person and/or temporal-modal features.
2. The dependent clause containing the switch-reference marker usually precedes the main clause.
3. Switch-reference systems mark the coreference of syntactic subjects, and not some semantic role or discourse function (cf. Foley–Van Valin 1984: 345–354, Woodbury 1983).
4. Same-subject (SS) and different-subject (DS) markers are frequently not structurally isomorphic. Moreover, the same-subject marker is typically indi-

visible, whereas the different-subject marker can include the subject agreement affixes (Haiman 1983).

5. There exists a hierarchy of the types of complex constructions with respect to their natural inclination to mark switch-reference. If a language has switch-reference then it should be expected primarily in constructions with the least specified type of semantic link between clauses (Jacobsen 1983: 170).

Later in this article we will consider a system of switch-reference which is clearly close to this typological standard. Functional explanations for the typological generalizations listed here will be attempted below in the conclusion of this paper.

1.2. The studies of switch-reference in Turkic linguistics

To our knowledge, the Turkic evidence has so far been mostly outside the attention zone of students of switch-reference. In the relevant literature we have noted a single mention of the data of Turkish (Haiman 1983, relying on the Turkish grammar of Lewis (1967); see also Haiman–Thompson 1984: 512). However, the facts presented in Lewis (1967) for the treatment of the converb suffixes *-(y)Ip* *-(y)A* as unquestionable same-subject markers are quite fragmentary; for some counterexamples see Kononov (1956: 475–476).

Systematic analyses of complex constructions or converb forms as marking (non)coreference of subjects are not found in the major grammars of Turkic languages (Dmitriev 1948, Kononov 1956, Kononov 1960, Isxakov–Pal'mbax 1961, Lewis 1967, Tekin 1968, Poceluevskij 1975, Ubrjatova 1976, Underhill 1976, Baskakov 1984, etc.), nor in comparative Turkic studies (Gadžieva 1973, Baskakov 1975, Juldašev 1977). Only particular forms are characterized as requiring or not requiring the identity of subjects (Dmitriev 1948: 189; Kononov 1956: 475–476; Juldašev 1977: 158, 167; for work on Tuva see below).

Very significant progress in describing Turkic (and other Altaic) switch-reference systems was made by the Novosibirsk typological school led by Majja I. Čeremisina, whose work mainly focuses on the phenomenon of “polypredicative” (i. e., multicausal) constructions. The theoretical approach of this school was developed on the basis of the languages of the “Altaic type”. In particular, Čeremisina and others have independently established the distinction of “same-subject” (*monosub"ektnyj*) vs. “varying-subject” (*variativno-sub"ektnyj*) vs. “different-subject” (*razno-sub"ektnyj*) forms of the dependent clause (Čeremisina 1977, 1980; Skribnik 1980). Novosibirsk scholars have provided detailed accounts of switch-reference in Altaic languages of the Tungusic (Gorelova 1980) and Mongolian (Skribnik 1980) branches, but in different terms: in the Russian tradition of Altaic studies, same-subject markers are traditionally called “sub-

jective attraction" (*sub"ektnoe pritižanie*) or "reflexiveness" (cf. Čeremisina 1979: 65). With respect to Turkic languages, Čeremisina (1980: 16, 22) noted that they also display examples of different-subject and same-subject constructions. The elaborate system of Yakut switch-reference is described in an interesting paper by Efremov 1979 (cf. also Efremov 1981) – this is probably the first systematic description of a switch-reference system in a Turkic language.

On the basis of everything said above we hope that a typologically-oriented systematic description of switch-reference in one of the Turkic languages spoken in the very geographical center of Asia can contribute to the typology of switch-reference and text cohesion, as well as to areal studies and Turkic linguistics. In section 2, multiclausal constructions that constitute the nucleus of the switch-reference system in Tuva are described; these constructions are exemplified in 2.1 and a semantic-syntactic treatment of them is suggested in 2.2 and 2.3. In section 3 we discuss the facts that can be called the periphery of the Tuva switch-reference system, i. e., constructions with adverbial clauses and with certain converbs.

2. Switch-reference in quasi-coordinate constructions

2.1. The mechanism of switch-reference

In general, English coordinate constructions with the conjunction *and*, where the semantic link between clauses is least specific, are translated into Tuva by means of the following kind of constructions:

- (3) a. *ava-m inek-ti saap-t-ar-ga, Kara-kis*
 mother-1SG cow-ACC milk-SUF-IMPV-DAT Kara-kys
čan-ip kel-ir
 go.home-CONV AUX-IMPV
 'My mother will milk the cow, and Kara-kys will go home.'
- b. *ava-m_i inek-ti saap-kaš, Ø_i čan-ip kel-ir*
 mother-1SG cow-ACC milk-CONV go.home-CONV AUX-IMPV
 'My mother will milk the cow and go home.'⁴

In both Tuva sentences, the first clause is marked as dependent, as shown by the nonfinite verb form, and the second as independent. The major difference between the sentences is that in (3a) the subjects of the two clauses are not coreferential and are expressed by overt NPs in each clause, whereas in (3b) they are coreferential and a subject is expressed overtly only in the first clause while the second clause has a zero subject. (Non-) coreference of the dependent-

clause subject with the main-clause subject is marked in the dependent clause by a verb affix. Evidently, we are dealing with a typical case of switch-reference. The affix *-ar-ga* marks a different subject, and the affix *-kaš* marks the same-subject condition. The term *quasi-coordination* will be explained in section 2.2.

2.1.1. Earlier treatments

The affix *-kaš* found in (3 b) has the underlying morphophonemic form *-GAš* and is called “the past tense converb” in a Tuva grammar (Isxakov–Pal’mbax 1961: 330).⁵ Cognate forms also exist in several other Turkic languages – Bashkir, Tatar, Uzbek, Uighur and others. In these languages, this form probably does not imply the coreference of subjects.⁶ For examples of its usage see: Dmitriev (1948: 248); Kononov (1956: 243); Grunina (1961: 137); Juldašev (1977: 76, 223 ff.). However, the Yakut form in *-aat*, cognate to the *-GAš* converb, is a same-subject converb (Efremov 1979: 65). Evidently, the status of the *-GAš* form and the corresponding Yakut form as same-subject forms is either an innovation or a reflex of an ancient situation. In the texts collected by Nikolaj Katanov, the author of the first Tuva grammar, this converb is used almost exclusively in contexts of coreference (cf. Katanov 1903: 934–1053).

The authors of the modern grammar of Tuva (Isxakov–Pal’mbax 1961) discovered the tendency for the *-GAš* converb to be used in the same-subject constructions (1961: 331–332), but they did not provide any interpretation of more complicated cases (see below). In a number of works on the syntax of the converb constructions in Tuva (Babuškin 1959, 1960; Delger-ool 1960; Sat 1982; Šamina 1983), this peculiarity of the *-GAš* converb is not mentioned. Ljudmila Šamina, in her dissertation, notes that “the converb in *-GAš* to a high degree guarantees the referential identity of its subject with the subject of the main action” (Šamina 1985 b: 129), but she herself cites four examples with noncoreference (1985 b: 131) without any additional comments (for an account of such cases see section 2.1.3 below); cf. also Čeremisina et al. (1986: 152).

The different-subject marker, attested in example (3 b), has the morphophonemic form *-Vr.GA* where *-Vr* is the affix of the so-called “future tense participle”, or, in our terminology, imperfective masdar (deverbal noun); the symbol “..” marks a position for inserting personal affixes of the first and second person that express subject agreement (the third person agreement marker is zero);⁷ *-GA* is the affix of the dative case. The use of such masdar-case forms as nonfinite verbs is very typical of the structure of dependent clauses in Tuva (as well as in Turkic in general). This morphosyntactic pattern, central for Turkic languages, served as a basis for the typology of the “predicative declension of participles” developed by Majja Čeremisina and her group (Čeremisina et al. 1984 a). According to Ljudmila Šamina, “participle-case constructions” are the

nucleus of the system of “polypredicative” constructions in Tuva (Šamina 1982: 61). Unlike other similar combinations, the morphological combination we are interested in (the masdar in *-Vr* plus the dative affix *-GA*) is found in relatively few Turkic languages (Gadžieva 1973: 305–306, Čeremisina 1981: 13). It is hard to say whether the marker in question has functions similar to those in Tuva in other Turkic languages. In publications on Tuva it has never been mentioned that it is the different-subject marker, although examples illustrating its usage have been cited more than once (Katanov 1903: 922–923; Isxakov–Pal’mbax 1961: 309; Sat 1960; Šamina 1982; Čeremisina–Šamina–Borgojakova 1984; Šamina 1985). Curiously, while Šamina singles out a special same-subject type of participle-case constructions, she fails to observe that the *-Vr.GA* form cannot be used in this way and simply does not cite examples of such uses (Šamina 1985b: 119–120). In the typological studies of Čeremisina it was correctly stated that Turkic masdar-case forms are functionally related to converbs. These forms, despite their structural transparency, “function in a converb-like way” (Čeremisina 1981: 32). In Tuva this is especially true of the form in *-Vr.GA*.

Since the switch-reference function of the *-GAʃ* and *-Vr.GA* forms has not been clearly identified in previous work on Tuva syntax, it was not possible to establish that these two markers constitute a functional pair and their semantics differs precisely in one component, being otherwise identical. We will discuss the shared semantic components of these two markers in section 2.2 below (for this kind of functional pair see Efremov 1979 on Yakut, and Skribnik 1980: 109–110 on Buryat). Multiclausal constructions including these markers are, according to our data, highly frequent and correlate with each other in a regular way, forming the nucleus of the morphosyntactic system of switch-reference in Tuva.

2.1.2. Principal examples

Let us examine the functioning of the switch-reference mechanism in biclausal constructions, taking into account all possible types of coreference between the arguments of the main clause and the dependent clause. First, let us look at constructions with verbs that have core case frames: nominative with one-place verbs, and nominative-accusative with two-place verbs. The same-subject marker appears only in the case of coreference of two subjects, whereas the different-subject marker appears in all other cases, no matter whether there is some coreference or not.

A. One-place verb plus one-place verb; no coreference:

- (4) *ača-ʒi čoru-j baarga, Kara-ool udu-p čid-ar.*
 father-3 go-CONV AUX:DS Kara-ool sleep-CONV AUX-IMPF
 ‘The father will leave and Kara-ool will go to sleep.’⁸

B. One-place verb plus one-place verb; coreference of subjects:

- (5) *Kara-ool_i čemnen-ip al-gaš, Ø_i aʒilda-p čort-kan.*
 Kara-ool eat-CONV AUX-SS work-CONV ride-PF
 'Kara-ool ate and went to work.'

C. Two-place verb plus one-place verb; no coreference – see (3 a).

D. Two-place verb plus one-place verb; coreference of subject – see (3 b).

E. Two-place verb plus one-place verb; coreference between the object of the first verb and the subject of the second verb:

- (6) *ool xana-ni_i doʒulaarga, ol_i čaraš apar-gan.*
 boy wall-ACC paint:DS it beautiful become-PF
 'The boy painted the wall, and it became beautiful.'

F. One place verb plus two-place verb; no coreference:

- (7) *ača-ʒi čed-ip keerge, ava-ʒi Kara-ool-du čemger-ip*
 father-3 come-CONV AUX:DS mother-3 Kara-ool-ACC feed-CONV
kaar.
 AUX:IMPF
 'When the father comes, the mother will feed Kara-ool.'

G. One-place verb plus two-place verb; coreference of subjects:

- (8) *Ø_{1SG} xooraj čoru-j bar-gaš, Ø_{1SG} ava-m-ni kór-gen men.*
 town ride-CONV AUX-SS mother-1SG-ACC see-PF 1SG
 'Having come to the town, I saw my mother.'

H. One-place verb plus two-place verb; coreference between the subject of the first verb and the object of the second verb:

- (9) *Ø_{1SG} xooraj čoru-j baar-im-ga, ava-m meni*
 town ride-CONV AUX:DS-1SG-DS mother-1SG I:ACC
kör-bejn bar-di.
 see-CONV:NEG AUX-PAST
 'I left for the town, and my mother did not see me.'

Note that in (9) the different-subject morpheme is broken in two parts by the first person singular agreement marker: the first part is merging in a portman-teau morph with the root, and the second follows the agreement marker.

I. Two-place verb plus two-place verb; no coreference:

- (10) *ava-zi inek-ti saap kaarga, Kara-kis šala-ni*
 mother-3 cow-ACC milk:CONV AUX-DS, Kara-kys floor-ACC
ču-p kaar.
 wash-CONV AUX-IMPF
 'After the mother milks the cow, Kara-kys will wash the floor.'

J. Two-place verb plus two-place verb; coreference of subjects:

- (11) *Kara-kis; duŋma-zi-n čemger-ip kaaš, Ø; inek-ti*
 Kara-kys brother-3-ACC feed-CONV AUX:SS COW-ACC
saar.
 milk:IMPF
 'After Kara-kys has fed her brother, she will milk the cow.'

K. Two-place verb plus two-place verb; other types of single coreference:

- (12) *urug; inek-ti čuurga, ava-zi Ø; maktaan.*
 girl cow-ACC feed:DS mother-3 praise:PF
 'The girl washed the cow, and her mother praised her.'
- (13) *ava-zi Kara-ool-du; čemger-ip kaarga, ol; inek-ti*
 mother-3 Kara-ool-ACC feed-CONV aux:DS he cow-ACC
saap kaar.
 milk:CONV AUX:IMPF
 'When the mother has fed Kara-ool, he will milk the cow.'
- (14) *ava-zi inek-ti; ču-p kaarga, Kara-kis onu;*
 mother-3 cow-ACC wash-CONV aux:DS Kara-kys it:ACC
saap kaar.
 milk:CONV AUX:IMPF
 'The mother will wash the cow, and then Kara-ool will milk it.'

L. Two-place verb plus two-place verb; coreference of subjects; coreference of objects:

- (15) *Ø; inee-n; ču-p al-gaš, ača-m; Ø; saar.*
 cow:3-ACC wash-CONV AUX-CONV father-1SG milk:IMPF
 'Having washed the cow, the father will milk it.'

M. Two-place verb plus two-place verb; the subject of the first verb is coreferential with the object of the second verb, and vice versa:

- (16) *i"t; Kara-ool-du; ižirip-t-arga, ol; onu; xap-t-ar.*
 dog Kara-ool-ACC bite-SUF-DS he it:ACC hit-SUF-IMPF
 'If the dog bites Kara-ool he will hit it.'

The set of sentences just cited clearly demonstrates that the mechanism of switch-reference operates in a quite regular way in biclausal constructions where each clause has a typical agentive subject in the nominative case. Let us now see how this purely syntactic, subject-oriented mechanism works if we have clauses with less typical subjects.

In the first place, we have to look at dative quasi-subjects and derived passive subjects. In Tuva there is a small class of one-place stative verbs governing the dative case, e.g., *sook bol-* 'be cold', *aaršilig bol-* 'ache'. Let us consider both possible locations of a dative quasi-subject that is coreferential with a nominative subject, in the main clause and in the dependent clause, respectively.

- (17) *Kara-ool; udu-j beerge (/ *ber-geš), aŋaa; sook bol-ur.*
 Kara-ool sleep-CONV AUX:DS AUX-SS he:DAT cold be-IMPF
 'If Kara-ool falls asleep, he will be cold.'
- (18) *Kara-ool-ga; sook boorga (/ *bol-gaš), ol; igla-j beer*
 Kara-ool-DAT cold be:DS be-ss he cry-CONV AUX:IMPF
 'If Kara-ool gets cold, he will cry.'

Clearly, the Tuva switch-reference system does not equate the dative quasi-subject with the genuine subject. And of course, the same-subject marker cannot be controlled by the dative of those verbs that have a nominative argument. It is precisely this nominative NP, the syntactic subject, that controls switch-reference, even if it is not the most central argument semantically:

- (19) a. *Kara-ool-ga; Kara-kis; taarž-irga (/ *taariš-kaš), ol; onu;*
 Kara-ool-DAT Kara-kys fit-DS fit-ss he she:ACC
oškaan.
 kiss:PF
 'Kara-ool liked Kara-kys, and he kissed her.' (lit. 'Kara-kys suited Kara-ool ...')
- b. *Kara-kis; Kara-ool-ga; taariš-kaš (/ *taarž-irga), ol; onu;*
 Kara-kys Kara-ool-DAT fit-ss fit-DS she he:ACC
oškaan.
 kiss:PF
 'Kara-ool liked Kara-kys and she kissed him.' (lit. 'Kara-kys suited Kara-ool ...')

Next we look at passive constructions. In a passive clause the original direct object turns up as the nominative subject, whereas the original subject is marked by the dative case. The verb displays a passive marker. Here are examples with passive in the dependent (20) and main (21) clauses:

- (20) *ool_i ava-zi-n-ga čug-dur-up al-gaš, Ø_i ojna-p*
 boy mother-3-SUF-DAT wash-PASS-CONV AUX-SS play-CONV
čoruur.
 AUX:IMPF
 ‘After the boy has been washed by his mother he will go to play.’
- (21) *Kara-ool_i aki-zi-n-ga_i užuraž-i ber-geš, ol_i aŋaa_i*
 Kara-ool brother-3-SUF-DAT meet-CONV AUX-SS he he:DAT
ette-d-ir.
 beat-PASS-IMPF
 ‘When Kara-ool meets his brother he will get beaten by him.’

Evidently, the passive subject controls switch-reference to the same degree as the initial subject. The agent phrase, marked by the dative case, is of course not equated with the subject:

- (22) *ava-zi_i keerge (/ *kel-geš), Kara-ool aŋaa_i ette-d-ir*
 mother-3 come:DS come-SS Kara-ool she:DAT beat-PASS-IMPF
 ‘When the mother comes, Kara-ool will get beaten by her.’⁹

Thus, in the case of nonprototypical subjects the mechanism of switch-reference retains its strict orientation to the syntactic subject in the nominative.

2.1.3. Deviations from strict coreference

Above we considered examples with a dative quasi-subject. Tuva has one further type of verbal case frame lacking the regular nominative subject. This type consists of several predicates with a lexically fixed subject and a possessor argument (in the genitive case in *-nIŋ*), for instance: *X-nIŋ xöŋnü bulgan-* ‘feel nauseous’ (lit. ‘X’s mood breaks away’), *X-nIŋ xöŋnü baksira-* ‘start feeling nauseous’ (lit. ‘X’s mood gets spoiled’). It turns out that the possessor argument of such a predicate is optionally treated like a subject, i.e., in constructions with such predicates either the same-subject or the different-subject marker can be used.

- (23) *Kara-ool_i čemnen-ip* $\left\{ \begin{array}{l} aarga, \\ \text{AUX:DS} \\ al-gaš, \\ \text{AUX-SS} \end{array} \right\}$ *Ø_i xöŋn-ü bulgan-i*
 Kara-ool eat-CONV mood-3 break.away-CONV
ber-gen.
 AUX-PF
 ‘When Kara-ool had eaten, he felt sick.’

- (24) *ool-dun_i xöŋn-ü* $\left\{ \begin{array}{ll} \textit{baksira-j} & \textit{beerge} \\ \text{get.spoiled-CONV AUX:DS} \\ \textit{baksiraas} \\ \text{get.spoiled:ss} \end{array} \right\},$
 boy-GEN mood-3
Ø_i čanip *kel-di.*
 return.home-CONV AUX-PAST
 'The boy became sick and he returned home.'¹⁰

Furthermore, this variation in the morphological marking is not an individual peculiarity of these predicates. In general, a possessor that is a part of a subject NP is treated like the subject itself with respect to switch-reference control. Thus, the possibility to use the same-subject construction in examples (23)–(24) is only a special manifestation of this rule. For example:

- (25) *Ø_i kaš* $\left\{ \begin{array}{l} \textit{köž-erge} \\ \text{make.move-DS} \\ \textit{köš-keš} \\ \text{make.move-ss} \end{array} \right\}, \textit{xaan-nin_i karaa}$
 sometimes khan-GEN eye-3
šokaraŋajn-ip kel-gen.
 flash-CONV AUX-PF
 'The khan made several moves, and his eyes flashed.'¹¹

- (26) *a"d-im* $\left\{ \begin{array}{ll} \textit{aari-j} & \textit{beerge} \\ \text{get.sick-CONV AUX:DS} \\ \textit{aaraas} \\ \text{get.sick:ss} \end{array} \right\}, \textit{oon anaj čoru-p}$
 horse-1SG thence further ride-CONV
šida-va-di-m.
 can-NEG-PAST-1SG
 'My horse got sick, and I could not ride further.'¹²

But marking the dependent clause as same-subject becomes impossible when not only the possessor of the dependent-clause subject is coreferential with the main-clause subject, as in (26), but also the dependent-clause subject itself is coreferential with a nonsubject argument of the main clause. Thus, in the following example we also have coreference of the dependent-clause subject "mother" with the main-clause object "her", in addition to the coreference between "my" and "I".

- (27) *ava-m_i kel-irge* (*/*kel-geš*); *men onu_i čemger-er men.*
 mother-1SG come-DS come-ss I she:ACC feed-IMP 1SG
 'When my mother comes, I will feed her.'

The difference between (26) and (27) can be accounted for as follows: In sentence (26), the right-hand part is a one-place clause, and by using the same-

subject form the speaker establishes a referential link between clauses without risking an incorrect reading of the sentence. In (27), by contrast, the advantage of highlighting the coreferential link through the possessor by means of the same-subject marker is canceled out by the possible contradiction between, on the one hand, the same-subject marker, and the coreference of the subject with the object, on the other. In this respect the following example is interesting, where the same-subject marker is triggered by the coreference of the possessors of the subjects of both clauses (here again there is variation: the form *sin-arga* with a different-subject marker can also be used).

- (28) *terge-niŋ öžee sin-gaš, duguj-lar-i iji tala-že orančok*
 cart-GEN axle:3 break-ss wheel-PL-3 two side-DIR far
čašta-j ber-gileen.
 jump.away AUX-ITER:PF
 'The axle of the cart broke, and its wheels flew far away to the side.'¹³

Having observed that the subject property of same-subject control is extended to the subject's possessor, we should point out that this kind of equal treatment of these syntactic units is apparently characteristic of the Turkic languages in general (this was noted for the process of relativization in Turkish, cf. Underhill 1972); cf. also Wilkins (1988: 166–168) for similar evidence from Australia.

The facts connected with the use of switch-reference markers in constructions with dative verbs and the passive favor the interpretation that the Tuva switch-reference mechanism is oriented exclusively toward the syntactic subject (the NP in the nominative case). However, the above examples of constructions with coreference through the possessor show that the same-subject marker is possible not only in cases of strict coreference between the subjects, but also when the referential link between them is weaker. These observations lead us to think that the use of the same-subject marker is really not governed by one, but by two factors: (a) the existence of two NPs in the nominative case;¹⁴ (b) the existence of coreference between these NPs. Condition (a) is more important – it is necessary. If there are no two NPs in the nominative case, as in (17)–(18), the use of the same-subject marker is impossible. If there are two nominative NPs, then the same-subject marker can be used even if condition (b) is not strictly fulfilled; this is what happens in examples (23)–(26) and (28). The deviations from strict coreference may not be too strong and are always connected either with incomplete coreference or with difficulty in establishing coreference or noncoreference.

The extension of the range of use of the same-subject marker to cases of coreference through the possessor are not the only deviation from strict coreference in Tuva. Investigators of different languages that have switch-reference systems have noticed "gray zones", where the orientation of the switch-reference mechanism toward coreference can become blurred (cf. Haiman–Munro 1983: xi). Cross-linguistically the most important sources of such blurring are:

1. incomplete coincidence of the referential extension of the subjects, e. g., one subject "I", the other one "we" (cf. Franklin 1983: 46–47);
2. referential nonprototypicality of the subject (the prototypical case is the referentially specific subject);
3. semantic nonprototypicality of the subject (the prototypical case is the internally active subject, the agent).

The individuality of the switch-reference system of a given language is found precisely in the nature and the degree of the blurring of the syntactic character of the switch-reference mechanism. We now consider in turn all three sources of such blurring in Tuva. It should be stressed at the outset that only the same-subject marker extends its scope by encroaching upon the domain of the different-subject marker and thereby creates variation; the reverse process is not found. The explanation for this is apparently that the switch-reference mechanism has the pragmatic function of establishing text cohesion and linking clauses, which is highlighted to a greater extent by the same-subject marker.

The clearest examples of incomplete coincidence of the referential extension of two NPs are the pronouns 'I' and 'we'. With such quasi-coreference between the two subjects the use of the same-subject marker is ruled out. As to the different-subject marker, the informants recognize the correctness of such structures with differing degrees of certainty. It is immaterial in which of the two clauses the subject pronoun with greater extension is found.

- (29) *men bažin-ga* $\left\{ \begin{array}{l} *kel-geš \\ \text{come-SS} \\ ?keerge \\ \text{come:DS} \end{array} \right\}$, *bis dü"šteki čem-ni čip*
 I house-DAT we noon meal-ACC eat:CONV
al-di-vis.
 AUX-PAST-1PL
 'I came home, and we had lunch.'¹⁵

In such a situation speakers prefer to use a construction that does not mark switch-reference at all. The acceptability of the different-subject marker is beyond doubt in cases where both subjects whose extensions coincide partially are third person NPs.

- (30) *iraaži-lar irlaar-i-n soksaaarga (/soksaaš), olar-niŋ*
 singer-PL singing-3-ACC stop:DS stop:ss they-GEN
čamdik-tar-i čoru-j bar-gan.
 some-PL-3 go-CONV AUX-PF
 'When the singers stopped singing, some of them left.'

In a sense, examples (23) to (25) and (28) with inalienable possession also belong to this class of cases. They differ in that the relation between the referents is not one of set-inclusion, but a part-whole relation. For the Tuva switch-reference mechanism the latter relation is closer to identity (i.e., coreference) than the former, so the same-subject marker is possible in the examples with coreference through the possessor.

The referentially prototypical subject is the referentially specific NP (on this and other referential characteristics see Padučeva 1985). NPs with another referential status are nonprototypical, referentially marginal subjects. NPs with generic referential status are treated on a par with prototypical subjects in Tuva, i.e., in the absence of coreference the different-subject marker is used.

- (31) *keži-lar eki ažiłdaarga (/ažiłdaaš), darga-lar amira-p*
 human-PL well work:DS work:ss boss-PL be.glad-CONV
tur-ar-lar.
 AUX-IMPF-PL
 'When the people work well, the superiors are glad.'

The same behavior is shown by universal NPs with the quantifier *šuptu* 'all'. Note, however, that the same-subject marker obligatorily appears when one of the clauses contains a variable with the universal nominal *bürü* 'everyone', which refers to the whole set of referents given in the other predicate:

- (32) *šuptu aalči-lar čed-ip kel-geš (/keerge), keži bürü-žü*
 all guest-PL come-CONV come-ss come:DS human every-3
belek ekkel-gen.
 gift bring-PF
 'All guests came and every one of them brought a present.'

In cases of strict coreference of subjects that are expressed by generic, universal and indefinite NPs, only the same-subject marker may be chosen. The same is true for syntactic zeroes with indefinite personal meaning:

- (33) *Ø; ažiłda-p kaap-kaš (/kaap-t-arga), Ø; ir-lar irlaar.*
 work-CONV AUX-SS AUX-SUF-DS, song-PL sing:IMPF
 'One sings songs when one finishes work.'

However, when there is no coreference between the two subjects, the indefinite personal zero behaves like the other types of nonprototypical subjects that we have considered. When one of the subjects is zero and the other one is a noncoreferential full NP, the same-subject marker may be used:

- (34) Ø *xleb-ti* *xooraj-da* $\left\{ \begin{array}{l} \textit{bi\ddot{x}ir-arga} \\ \textit{bake-DS} \\ \textit{bi\ddot{x}ir-ga\ddot{s}} \\ \textit{bake-ss} \end{array} \right\}$, *beer* *onu*; *mašina*
bread-ACC town-LOC hither it:ACC car
söört-üp *tur-ar*.
bring-CONV AUX-IMPf
‘They bake the bread in the town, and the car brings it here.’

There cannot be two noncoreferential indefinite personal zeroes in a Tuva sentence, so that it is impossible to check which marker is used in such a situation.

Let us now look at the last type of a referentially nonprototypical subject, the impersonal syntactic zero. It behaves regularly: whenever one of the clauses is impersonal, the different-subject marker is used, independently of the type of the subject of the other clause.

- (35) *songa-dan xadi-p egeleerge (/ *egeleesʃ) men don-a*
window-ABL blow-CONV begin:DS begin:ss I freeze-CONV
ber-di-m.
AUX-PAST-1SG
'A draft began to come through the window, and I froze.' (lit. 'It
began to blow ...')
- (36) *karangila-j beerge (*ber-geʃ), soo-j ber-gen.*
get.dark-CONV AUX:DS AUX-SS get.cold-CONV AUX-PF
'It grew dark and it became cold.'

Evidently, from the point of view of the Tuva switch-reference mechanism the impersonal zero is not a subject at all, so that the first condition for the use of the same-subject marker, the existence of two subjects, is not fulfilled. In this respect the impersonal clauses are similar to the dative clauses in examples (17)–(18).

The semantic features of the prototypical subject can be divided into two interconnected, but nonidentical types: lexical-semantic features and role features. We will not consider subjects that are nonprototypical with respect to their semantic role structure because they are not found at all in Tuva. Thus, there are no literal Tuva equivalents of clauses where an NP with a locative or instrument role occupies the subject position (e.g., *The bottle holds a lot of water*;

The rock hurt the child). The less a referent is internally active and concrete, the more it is nonprototypical as a subject. Subjects that are expressed by inanimate, but concrete NPs do not trigger any changes in the use of switch-reference markers. The minimal semantic nonprototypicality to which the switch-reference mechanism is sensitive is nonconcreteness. Typical examples are natural factors and elements (wind, rain, season, illness, hunger). When one of the subjects is of this type, either the different-subject marker or the same-subject marker may be used, but only if the second subject, too, is inanimate:

- (37) a. *čas* $\left\{ \begin{array}{l} \text{důž-erge} \\ \text{come.down-Ds} \\ \text{důš-keš} \\ \text{come.down-ss} \end{array} \right\}$, *čėček-ter* *čast-ip* *kel-gen.*
 spring flower-PL blossom.out-CONV AUX-PF
 ‘Spring came, and the flowers blossomed out.’
 b. *čas důžerge* (/ **důškeš*), *men xooraj-žė* *čorup-tu-m*
 I TOWN-DIR ride-PAST-1SG
 ‘Spring came, and I rode into town.’¹⁶

The tendency to use the same-subject marker is strongest when one of the subjects is an NP with the meaning of a period of time. In this case the second subject can also be animate.

- (38) *üš* *čıl* $\left\{ \begin{array}{l} \text{ert-keš} \\ \text{pass-ss} \\ \text{ert-erge} \\ \text{pass-Ds} \end{array} \right\}$, *xooraj-žė* *čorup-tu-m*
 three year TOWN-DIR ride-PAST-1SG
 ‘When three years had passed, I rode into town.’

A similar phenomenon occurs in sentences where one of the subjects is a mass noun that is noncoreferential with the other subject. A comparison of the following two sentences shows how the feature count/mass of the second subject influences the possibility of the same-subject marker (when used with the lexical item “money”, the quantifier “three” leads to a count meaning):

- (39) a. *čaga* $\left\{ \begin{array}{l} \text{keerge} \\ \text{come:DS} \\ \text{kel-geš} \\ \text{come-ss} \end{array} \right\}$, *aška* *kel-gen.*
 letter money come-PF
 ‘A letter came, and money came.’ (e. g., enclosed in the letter)
 b. *čaga keerge* (/ **kel-geš*), *üš aška kel-gen*
 letter come:DS (come-ss) three money come-PF
 ‘A letter came, and the three roubles came.’

Deverbal nominals (like '(the) work', '(the) fight') do not favor the use of the same-subject marker according to our data. Let us now summarize the general rules for the use of switch-reference markers. If in a biclausal construction there are no two nominative NPs, then the choice is clear: the different-subject marker. If there are two subject NPs and their referents are clearly coreferential or clearly referentially disjoint, then the same-subject marker or the different-subject marker, respectively, is chosen. If the subjects (or at least one of them) are sufficiently nonprototypical (indefinite personal zero, nonconcrete meaning, etc.), the switch-reference mechanism "loses its orientation" and is unable to establish the identity or distinctness of insufficiently identified entities. Strictly speaking, these entities are distinct, so the different-subject marker is possible, but their distinctness is not sufficiently clear, so the same-subject marker is possible as well. It should be emphasized that we are everywhere dealing with an expansion of the same-subject marker into the area of incomplete coreference.

2.1.4. Negation

A clause whose verb comprises a switch-reference marker can, of course, not only be affirmative, but also negative. Negation is expressed cumulatively together with the markers of converbs and masdars (at least in the cases that interest us here). The negative same-subject marker is *-BAjn* (a universal negative converbal marker). The negative different-subject marker is *-BAS..GA*.¹⁷ If difference of subject is marked on a negative analytic verb form, the converb of the nonfinal (lexical) verb takes the negative form in *-BAjn*, and the final (auxiliary) verb stays in the affirmative different-subject form in *-Vr..GA*, according to our data. The negative same- and different-subject markers do not show any differences in their syntactic behavior vis-à-vis the affirmative markers. Examples include:

- (40) *urug; xöjler-i-n čug-bajn, Ø; čoru-j bar-gan.*
 girl shirt-3-ACC wash-SS:NEG go-CONV AUX-PF
 'The girl went away without washing the shirt.'

- (41) *ava-çi Ø; { čemger-bejn baarga }, uruu; igla-p*
 mother-3 { feed-CONV:NEG AUX:DS } child:3 cry-CONV
čemger-beske
feed-DS:NEG
tur-gan.
 AUX-PF
 'Mother did not feed the child, and he cried.'

2.2. Semantics of connection in switch-reference constructions

What is the grammatical meaning common to the converbal form in *-GAʃ* (same-subject marker) and the masdar-case form in *-Vr.GA* (different-subject marker)? The semantic relations between the main and the dependent parts of the biclausal constructions in the examples cited in section 2.1 were quite varied. The idea of the existence of a link between two situations, common to all of them, was realized in different cases as a temporal relation (the event of the dependent clause precedes the event of the main clause), a logical relation (the event of the dependent clause is a condition for the event of the main clause, or a consequence event, expressed by the main clause, follows from a cause event, expressed by the dependent clause), a logical-temporal relation (one event naturally follows the other). The event of the dependent clause precedes the event of the main clause in some sense, temporally or logically. This meaning is iconically reflected in the linear order of the clauses, and the markers *-GAʃ* and *-Vr.GA* themselves carry only the idea of a link between the clauses, without conveying any temporal meaning. As can be seen in the examples, in multiclausal constructions of the type considered here the grammatical meaning of tense is conveyed only by the finite forms of the main clause. Nor do the same- and different-subject markers have an aspectual meaning of their own; the aspectual meaning in the dependent clause with these forms is conveyed only by auxiliary verbs.

Of special interest is the tense-neutrality of the different-subject form, which is morphologically built on the basis of the imperfective masdar in *-Vr*. In finite forms the masdar in *-Vr* conveys the temporal meaning “non-past tense” and the aspectual meaning “imperfective”. The meanings “perfect” and “past” are mostly expressed by masdar forms in *-GAN*. The aspectual-temporal contrast of the affixes *-Vr* and *-GAN* is also preserved in the masdar-case forms *-Vr.DA* and *-GAN.DA*, which mark dependent clauses and are structurally similar to the different-subject marker (see section 3.1 for more details). In these two forms the locative case suffix *-DA* is added to the masdar marker and the person agreement suffixes. The dependent-clause forms in *-Vr.DA* and *-GAN.DA* express the meaning of simultaneity or cooccurrence of two events. This meaning component is clearly conveyed in these forms by the locative case forms, which contain the idea of collocating two objects together. Similarly, in the different-subject marker *-Vr.GA*, the notion of non-simultaneity and link is expressed by the dative case which contains the idea of a displacement from one location to another, while the masdar component of the different-subject marker has been desemanticized and has lost all aspectual-temporal meaning, in contrast to the

masdar affixes in the *-DA* forms. Furthermore, there is no form expressing a dependent clause that combines the *-GA*n masdar with the dative case.¹⁸ This fact provides evidence from the system for the fact that, despite its transparent internal structure, the different-subject marker *-Vr.GA* has left the paradigm of masdar-case forms, has merged into a unitary whole and is now in functional opposition to the marker *-GA*j, expressing the same relative time and differing only in its switch-reference properties. To use Čeremisina's expression, the *-Vr.GA* form has been "converbalized" (*deepričastizacija*), because it has been isolated from the other formally parallel forms (Čeremisina et al. 1984: 39). The regular interaction of two dependent-clause forms, for the same and different-subject conditions, forms the switch-reference system in Tuva. Although the two forms have the same grammatical meaning, except for their switch-reference function, the same-subject dependent clauses naturally imply a greater connectedness of the events than the different-subject clauses. In connected discourse, the form that expresses the greater connectedness has communicative priority. This also explains the fact that in cases of deviation from the prototypical referential relations between clauses (i.e., from coreference) it is always the same-subject forms that expand into the domain of the different-subject forms, but never the other way round. In several recent papers it has been proposed that in some languages, the morphology that might be thought of as expressing the switch-reference distinction in fact expresses the event linkage (Carlson 1987, Mithun 1993).

2.3. Quasi-coordination as a type of syntactic dependence in switch-reference constructions

The interpretation of multiclausal constructions with a dependent clause marked by a converb or masdar-case form of the verb has traditionally been controversial in Soviet Turkic linguistics. The content of this controversy is widely known (for overviews cf., e.g., Gadžieva 1957, Nartyev 1975, Ubrjatova 1976: 14–24, Hanser 1982; with reference to Tuva: Sat 1960) and briefly amounts to the following dilemma: should sentences of the type (42) be regarded as "complex" (i.e., biclausal) or "simple" (expanded); in other words, should their dependent clauses be regarded as subordinate clauses (Russian *pridatočnoe*) or as "phrases" (Russian *oborot*); in yet other words, should such dependent clauses be considered as being of the same type as subordinate clauses with European-type conjunctions (such clauses are also attested in Turkic languages but usually constitute a very marginal kind of dependent clause; cf. Čeremisina 1981) or of a different type? Example (3) is here re-presented as (42).

- (42) a. *ava-m inek-ti saap-t-arga, Kara-kis ĉan-ip*
 mother-1SG cow-ACC milk-SUF-DS Kara-kys go.home-CONV
kel-ir.
 AUX-IMPF
 'Mother will milk the cow and Kara-kys will come home.'
- b. *avam; inekti saap-kaš Ø; ĉanip kelir.*
 milk-ss
 'Mother will milk the cow and come home.'

Our view on this matter is the following. The whole problem is a result of carrying over terms and categories from Russian to Turkic grammar which were coined in Russian grammatical research and make sense elsewhere only with serious reservations. In carrying over these categories to Turkic languages, Turkologists take as their defining features either structure or meaning. In the first case it turns out that Turkic languages do not have subordinate clauses at all, because subordinate clauses must of necessity have a subordinating conjunction (as in Russian) and all converbal and masdar-case clauses fall into the category of phrases. In the second case it is practically the Russian translational equivalent that is taken as a basis for the classification. In this case most of the converbal and masdar-case clauses turn out to be subordinate clauses. In order to arrive at a typologically adequate solution of the problem, the "Russocentric" approach and the Russian-oriented distinction between "phrase" and "subordinate clause" should be given up completely. A clause can have quite different degrees of dependence or reduction: from minimal dependence (in a coordinate construction) to maximal dependence (as a "copredicate" in the sentence *He went toward the house with a quick pace*).¹⁹ "Phrase" and "subordinate clause" are labels that refer to two points on the scale of reduction in Russian that are not universally applicable. What is universal is the functional types of multi-clausal constructions that are identified on the basis of semantic relations between clauses, in particular, complement clauses, adverbial clauses, coordination. But the degree of reduction is expressed in every language differently, by means of the syntactic (internal structure of the dependent clause) and morphological (marking of the verb) resources of the language.

What type of multiclausal construction do sentences of the type (42), which are of interest to us here, belong to? Čeremisina (1981) considers all such sentences as belonging to the "adverbial subsystem" of "polypredicative constructions", i. e., as constructions with adverbial clauses. However, let us turn again to the examples in section 2.1.2. As we observed, the specific semantic link between the clauses can vary, and the only constant feature is the notion of the existence of a link between the situations and of a precedence relation between

the two clauses. This leads us to think that these constructions are semantically closest to coordinate constructions. Such an interpretation finds an indirect confirmation in their Russian equivalents: the majority of the examples are translations of Russian coordinate sentences with the conjunction *i* 'and'. In addition, the range of meanings expressed by these biclausal constructions is very close to the range of meanings of the Russian conjunction *i*. As is well known, the meaning of the coordinating conjunction in Russian is never completely free of adverbial meaning (cf. Švedova 1980: 617). But in Russian conjunctive coordination allows the use of finite verb forms in both coordinate clauses. If we give up the a priori assumption that this feature of predicate coordination is universal, the Tuva constructions with a switch-reference marker must be regarded as coordinate. The typological difference between Turkic and Indo-European languages is that Turkic languages have no (or very little) conjunctive coordination. This is why they express coordination by making one of the clauses dependent on the other by means of a nonfinite verb. (This type of coordination is typologically very widespread, cf. Bergel'son 1986). Since Tuva does have marginal (conjunctionless) constructions with two or more finite verbs, we will call switch-reference constructions *quasi-coordinate*.

Adverbial clauses, on the other hand, are expressed by means of masdar-postposition constructions in Tuva. In contrast to converbal and masdar-case constructions, they express a semantically specific type of link – temporal sequence, cause-result relation, etc., and not the existence of a link per se, as the quasi-coordinate constructions (on masdar-postposition constructions see Šamina 1981, 1985 a).

That the link in quasi-coordinate constructions is of a coordinative kind is confirmed by the freedom with which chains of dependent clauses can be built up in which only the last clause has a finite verb. Tuva narrative texts abound in such chaining constructions with dependent clauses containing switch-reference markers (cf., e.g., Babuškin 1959: 100, Isxakov–Pal'mbax 1961: 331). These really *multiclausal* constructions are characterized by a principle that can be called the principle of linear control of switch-reference: the use of a switch-reference marker in every clause is controlled by the (lack of) coreference with the subject of the clause that follows, for example:

- (43) *ool üžen čilgi-zi-n berip-keš, čilgi-zi-niŋ eŋ eki*
 boy thirty herd-3-ACC give-SS herd-3-GEN most good
a"d-i-n tud-up mun-up al-gaš, aal
 horse-3-ACC catch-CONV saddle-CONV AUX-SS camp
keex-ip čor-up tur-arga, [...] Karati-Xaan dep
 go.around-CONV AUX-CONV AUX-DS Karaty-Khan AUX

kiži šidiraa möörej-i čarlaan.

person chess contest-ACC announce:PF

'The boy gave away thirty of his horses, chose and saddled the best horse of the herd and went around the camp, and (at that time) a person called Karaty-Khan announced a chess contest.'²⁰

- (44) *koža aal-ga baar-im-ga, kiži čok boorga, udavajn-daa*
 neighbor camp-DAT go:DS-1SG person be.not be:DS soon-PTCL
čanip-kan men.
 go.home-PAST 1SG

'I went to the neighboring camp, there was nobody there, and I soon went back home.'²¹

Tuva is not unique in showing this tendency for chaining constructions. First, the existence of such chains in other Turkic languages has often been noted (cf., e.g., Baskakov 1975: 237, Gadžieva–Birjukovič 1983: 7). Second, it is well known that many languages with switch-reference have a tendency for chaining text structures (cf. Longacre 1983).

3. Other types of switch-reference marking constructions

It is not always easy to draw semantic distinctions between quasi-coordinate constructions and those with adverbial clauses. The prototypical discourse function of the quasi-coordinate constructions is signaling maintenance and preserving or, in contrast to this, change of the main active participant of the situation described, i.e., marking of switch-reference. The information concerning the semantic type of relation between the conjoined situations is secondary. The opposite is the case as far as constructions with adverbial clauses are concerned. Their prototypical discourse function is signaling the specific type of semantic relation between events, one of which is described as a temporal, causal or purposive elaboration of the other. Information on common participants can be provided, however, as secondary in importance. It is of interest to know whether a language like Tuva employs its switch-reference resources in various constructions not specifically focused on participant tracking. (For surveys of Tuva constructions with adverbial clauses, see Babuškin 1960, Delger-ool 1960, Sat 1982). In this section, several types of constructions with adverbial clauses are analyzed. We are primarily interested in what means are used for coding sameness/difference of subjects, to what extent these means are regular, and whether they should be viewed as components of the switch-reference system.

3.1. Constructions with temporal clauses

There are a variety of temporal clauses in the Tuva language. Thus, 85 formal types of such clauses are described in Šamina (1985 b). (Among them are our quasi-coordinate constructions with the markers *-GAʃ* and *-Vr.GA*.) Temporal constructions considered in that paper to be the basic ones are those with the dependent verb marked as a masdar-case form in *-GA* or *-DA* (dative or locative cases, respectively). From our point of view, these forms, which look similar at first glance, have very different functions, which is reflected in different morphological and syntactic restrictions on their distribution. The conditions for using *-GA* forms and their functions within the system of switch-reference have been analyzed in full detail in section 1 above. As for *-DA* forms, they appear to be the most frequent masdar-case forms in Turkic languages (see, for instance, Gadžieva 1973; Čeremisina 1981). In the works on the Tuva language, they have been treated similarly to *-Vr.GA* forms (Šamina 1982; Sat 1960; Čeremisina et al. 1984). The following examples show some occurrences of *-DA* forms.

- (45) a. *uruu aar-ir-da, ava-ʒi igla-p tur.*
 girl:3 sick-IMP-TEMP mother-3 cry-CONV AUX
 'When the girl is sick, her mother cries.'
- b. *xün ün-gen-de, čer čiraan.*
 sun rise-PF-TEMP earth get.illuminated:PF
 'When the sun rose, the earth became illuminated.'²²
- c. *(men) udu-p čid-ir-im-da ava-m (meni) otturup-kan.*
 I sleep-CONV AUX-IMP-1SG-TEMP mother-1 I:ACC awaken-PF
 'When I fell/was asleep, my mother awakened me.'
- d. *ava-ʒi aʃa-ʒi-bile čugaalaž-ip olur-da, ogl-u uruu-bile*
 mother-3 father-3-with talk-CONV AUX-TEMP boy-3 girl:3-with
ten-ip tur-gan.
 fool-CONV AUX-PF
 'While the mother and father talked, their children fooled around.'
- e. *siġen šik-ta, kezer xerek.*
 grass wet-TEMP cut must
 'While the grass is wet, one has to mow (it).'

The following morphological features are characteristic of *-DA* constructions: co-occurrence with both imperfective (45 a) and perfective (45 b) masdars, that is, *-Vr*- and *-GAN*- forms, respectively; with simple or analytic (45 c) verbal predicates; directly with the auxiliary stem – the most frequent case (45 d); with an adjective predicate (45 e). From a syntactic point of view, *-DA* constructions tend to be used in combination with the noncoreference of subjects, though this correlation is not as strict as for *-Vr.GA* constructions (see below).

Semantically, *-DA* constructions represent the idea of a loose temporal cooccurrence of two events, i.e., partial or absolute identity of their temporal boundaries (see Katanov 1903: 924; Delger-ool 1960; Šamina 1985 b: 60). It is this meaning that is responsible for the frequent non-coreference of subjects encountered in *-DA* constructions: Naturally, in the real world temporally cooccurrent events more frequently involve distinct actors (cf., however, a more peculiar situation represented by *-BIšaan* constructions, see below). Deviations from this correlation occur in nonstandard situations where either it is difficult to judge whether the coreference of subjects is really observed – see (46) (and cf. 2.1.3 above), or the temporal clause is expressed in a reduced way; in the last case the temporal clause usually breaks up the main clause – see (47)–(48).

- (46) *don-a ber-gen-de, ažiida-ar-i dam baar.*
 freeze-CONV AUX-PF-TEMP work-IMPF-3 still go:IMPF
 ‘When one is freezing, one works even better.’ (lit. ‘... his working goes ...’)
- (47) *duu meen taaliŋ-im-ni [ün-er-iŋ-de] ap al-ir*
 that I:GEN bag-1SG-ACC exit-IMPF-2SG-TEMP take:CONV AUX-IMPF
sen.
 2SG
 lit. ‘That bag of mine, when you go out, you’ll pick up.’²³
- (48) *ača-m [Toora-xem-de bol-gan-da] menee xöjlen sad-ip*
 father-1SG Toora-khem-LOC be-PF-TEMP I:DAT shirt buy-CONV
ber-gen.
 AUX-PF
 ‘My father, staying at Toora-khem, bought a shirt for me.’

The temporal *-DA* clause in (48) obviously has the primary locative meaning, whereas the auxiliary *bol-* ‘be located’ simply serves as the carrier of the *-DA* marker.

Thus, *-DA* constructions should be analyzed as temporal, and hence, adverbial clauses, in contrast to *-Vr.GA* constructions, which were analyzed as quasi-coordinate. This claim is also supported by the fact that *-DA* clauses fail to participate in clause chaining (cf. examples with *-Vr.GA* clauses in 2.3). This is motivated by a closer and more unidirectional dependence of the *-DA* modifier on the main clause as compared to the quasi-coordinate constructions.

From the point of view of the switch-reference system, a “quasi-minimal pair” for *-DA* constructions appears to be the construction with the *-BIšaan* converb which requires strictly coreferential subjects. (On this converb and its properties see Babuškin 1959: 101; Isxakov–Pal’mbax 1961: 388; Šamina 1985 b:

125–126). The discourse function of *-BIšaan* constructions is to emphasize strict temporal cooccurrence, and even fusion of two events. This is a peculiar situation, and *-BIšaan* clauses are not frequent in Tuva texts. It is worth mentioning that *-BIšaan* constructions again bring in the difficult problem of delimitation between adverbial clause constructions and coordination: the idea of conjunction is expressed to a maximal degree by a structure where events are unified both by a common main participant – especially when it is the only participant of a one-place-verb – and by temporal cooccurrence.

- (49) a. *ava-zi uruu-n čemger-bišaan, čugaalaž-ip olur.*
 mother-3 girl:3-ACC feed-TEMP:SS talk-CONV AUX
 'The mother feeds her daughter and speaks to her.'
- b. *čem xajindir-bišaan, ava-zi uruu-n čemger-ip tur-gan.*
 food cook-TEMP:SS mother-3 girl:3-ACC feed-CONV AUX-PF
 'While cooking, the mother (simultaneously) fed her daughter.'

An important fact about the Tuva switch-reference system is that in same-subject constructions the deletion of a subject NP can occur either in the main or in the dependent clause – see the positions of the NP *ava-zi* in (49 a–b). But this fact can receive another interpretation: it is always the subject of the dependent clause that is deleted; but since the dependent clause in all cases precedes the main clause, sometimes the remaining subject NP can be dislocated to the leftmost position in the sentence. Thus, the full NP *ava-zi* in (49 a) either belongs to the dependent clause, to which it is actually adjacent, or it is dislocated from its original position in the main clause, in which case the dependent clause is surrounded by main clause material. Each of the interpretations has its pros and cons, but in any case the variant with the subject in the left clause – see (49 a) – can be justifiably considered a quasi-coordinate construction, because it is characterized by anaphoric, not cataphoric deletion.

When there is a pragmatic need of communicating the idea of temporal cooccurrence or fusion of two events with distinct actors, a passive variant of the *-BIšaan* construction can be used, permitting to preserve the subject coreference.

- (50) a. *oglu ača-zi-n-ga ette-dir-bišaan, igla-p tur-gan.*
 boy-3 father-3-SUF-DAT beat-PASS-TEMP:SS cry-CONV AUX-PF
 lit. 'The boy gets beaten by his father and cries.'

Of course, this is possible only if *some* coreference between the clauses is present, as in (50 a), where the patient of the dependent clause is coreferential with the agent of the main clause. Compare this with the case where there is no coreference, subjects cannot be made coreferential and the *-DA* clause is used:

- (50) b. *ogl-u ača-xi-n-ga ette-dir-ip tur-da, ava-xi*
 boy-3 father-3-SUF-DAT beat-PASS-CONV AUX-TEMP mother-3
igla-p tur-gan.
 cry-CONV AUX-PF
 'While the father was beating the son, his mother cried.'

A peculiar feature of *-BIšaan* converbs is the possibility of their autonomous use as finite forms with person markers. When used in this manner they have an emphatic meaning "X is still doing P (and) still doing Q", as in (51 b–c).

- (51) a. *kettin-bišaan, uruu irla-p tur.*
 dress-TEMP:SS girl:3 sing-CONV AUX
 'While dressing, the daughter sings.'
- b. *uruu kettin-bišaan, diran-bišaan.*
 girl:3 dress-TEMP:SS comb-TEMP:SS
 'The daughter is (still) dressing and combing herself.'
- c. *men kettin-bišaan men, men diran-bišaan men.*
 I dress-TEMP:SS 1SG I comb-TEMP:SS 1SG
 'I am dressing and combing myself.'
 (with a characteristic prolonged intonation)

The *-BIšaan* and *-DA* forms are close to being part of the switch-reference system. But still there are some features which differentiate them from the constructions analyzed in section 2: (a) they are not full synonyms, as *-BIšaan* has an emphatic sense of paralleling events; (b) *-Vr..DA* and *-GAn..DA* are not as consistent with respect to their different-subject-function as *-Vr..GA* is.

Other patterns of temporal constructions – with conjunctions or masdars plus postpositions (see Šamina 1985 b) – are not sensitive to switch-reference and thus are not examined here. It should also be added that though in some cases a temporal relation may implicate a causal or conditional relation (depending on the context and aspectual characteristics of the event), the expression of temporal cooccurrence remains the prototypical function of *-DA* and *-BIšaan* constructions. The prototypical means for expressing condition are constructions with a special conditional mood marker in the dependent clause. They are not sensitive to switch-reference (see Kibrik 1988) and thus are not considered in this paper.

3.2. Constructions with causal clauses

Among the great variety of Tuva constructions that express causal relations (see Šamina 1980, 1985 a), one can single out a nuclear subset where the switch-reference distinction is observed. (As noted above, in adverbial clause construc-

tions, switch-reference marking tends to be associated with the least specific semantics). The following are some basic examples:

- (52) a. *men korg-a ber-gen bol-gaš, börü-nü ölür-üp ſida-vaan men.*
 I be.afraid AUX-PF be-SS wolf-ACC kill-CONV can-NEG:PF 1SG
 'I could not kill the wolf because I had been frightend.'
- b. *börü anijak boorga, ölür-be-di-m.*
 wolf young be:DS kill-NEG-PAST-1SG
 'Since the wolf was young, I did not kill it.'
- c. *bo äil sook boorga, xöj aŋ öl-gen.*
 that year cold be:DS much animal die-PF
 'Since the year was cold, a lot of animals died.'

Example (52 a) shows a same-subject construction, and (52 b) a different-subject construction with a coreferential direct object in the main clause. In (52 c) there are no coreferential NPs. It is obvious that the switch-reference markers are the same as in quasi-coordinate constructions: *-GAš* and *-Vr.GA*. However, in causal constructions there is a special carrier for those markers, namely the existential copula *bol-* that can accompany not only nominal but also verbal predicates of dependent clauses without any restrictions on their form – see (52) and also cf. (53):

- (53) a. *ača-m dika turup-kan bol-gaš, udu-j ber-gen.*
 father-1SG very be.tired-PF be-SS sleep-CONV AUX-PF
 'My father fell asleep because he grew very tired.'
- b. *ača-m dika turup-kaš, udu-j ber-gen.*
 father-1SG very be.tired-SS sleep-CONV AUX-PF
 'My father grew very tired and fell asleep.'

Some peculiarities of switch-reference in causal constructions can be seen in sentences like (54 a):

- (54) a. *sen eki boor-uŋ-da kel-di-m.*
 you good be:IMPF-2SG-TEMP AUX-PAST-1SG
 'I came because you are good.'

Here the different-subject marker is *-DA* – the same as in temporal clauses. But its carrier is still a finite form of the same copula *bol-*. One can compare it to an analogous temporal clause construction demonstrating the nominal predicate:

- (54) b. *sen bičii tur-uŋ-da, seŋee ir-lar irla-p ber-ip*
 you little AUX-2SG-TEMP you:DAT song-PL sing-CONV AUX-CONV
čoraan men.
 AUX:PF 1SG
 'When you were young, I sang songs to you.'

The question arises as to what the grammatical status of the copula *bol-* is which appears as *bolgaš*, *boor..GA* or *boor..DA* and can accompany all types of predicates in causal clauses. From our point of view it would be misleading to describe these forms as conjunctions or postpositions (see Isxakov–Pal 'mbax 1961: 450; Šamina 1980; Šamina 1985 a, 1985 b). At the same time, they cannot be equated with the auxiliaries and be thus considered a part of the complex verbal predicate since they are attached to an already formed analytic complex. We would prefer to view these markers not in terms of paradigmatically defined word classes (conjunctions vs. auxiliaries etc.), but functionally, according to their role as switch-reference markers in causal constructions. This is even more reasonable in view of the special character of the same/different-subject opposition in causal constructions: not *-GAš* vs. *-Vr..GA*, but *bolgaš* vs. *boor..Ga*, *boor..DA*. (The existence of the two latter forms is due to different aspectual features of the events in question). In general, constructions with causal clauses belong to the switch-reference system, their morphological base being the quasi-coordination switch-reference markers *-GAš/-Vr..GA*.

3.3. Constructions with purposive clauses

A large group of biclausal constructions in Tuva show in their dependent clause a marker based on a form of the verb *de-* 'say, tell'. Among these, constructions with purposive clauses form a special and easily definable class (another class that is not of interest to us here is complements with verbs of intellectual activity). The purposive clause is introduced by the marker *deš* which is in fact the *-GAš*-converb of *de-*. (For further information on purposive clauses see Šamina 1980; Sat 1981). Thus an expression translatable as 'X does P in order to do Q', means literally 'saying Q, X does P'. The following are some basic examples:

- (55) a. *ava-m-ga užuraž-ir deš, men xooraj čorup-tu-m.*
 mother-1SG-DAT meet-IMP PURP I town go-PAST-1SG
 'I went to the town in order to see my mother.'
- b. *ava-ži dištan-žin deš, urun mün-nü xajindir-ip kaan.*
 mother-3 rest-IMP:3SG PURP girl:3 soup-ACC cook-CONV AUX:PF
 'For the mother to have a rest, her daughter cooked the soup.'
- c. *ača-m konču-tun-ma-žin deš, men ijaš-ti čar-ip*
 father-1SG scold-SUF-NEG-IMP:3SG PURP I firewood chop-CONV
kal-di-m.
 AUX-PAST-1SG
 'I chopped firewood so that my father would not scold me.'

These examples suggest that the different/same-subject contrast is relevant for purposive constructions as well, though the means of expressing it are different. The different-subject relation (55 b, 55 c) is signaled by the “imperative-optative mood” (Sat 1955: 695) on the dependent verb; for the third person its marker is *-ZIn*. The literal meaning of (55 b), for example, is “Saying: ‘Let the mother have a rest’, the daughter cooked the soup”.

As for the same-subject relation, (55 a), it is signaled by the plain indicative mood. That this form is a finite one, and not a masdar or participle, is better seen in examples with nonzero agreement:

- (56) *ača-m dištan-ir men deēš, čan-ip keel-gen.*
 father-1SG rest-IMPF 1SG PURP go.home-CONV AUX-PF
 ‘My father came home to have a rest.’

The optional first person marker *men* is present in this sentence. It is used to describe the purpose of some event most explicitly, by verbalizing it through direct speech – “Father came, saying: ‘I’ll have a rest’”. The absence of the person marker *men* in (56) would describe that purpose by verbalizing it as indirect speech: “Father came, saying that he’ll have a rest”.

These two possibilities create occasional ambiguities which are resolved by the context, depending on whether the purposive is construed as representing direct or indirect speech:

- (57) *ava-m meni čemger-ip kaq-χin deēš, sen aχil-dan*
 mother-1SG I:ACC feed-CONV AUX-IMP:3SG PURP you work-ABL
kel-di-ŋ.
 come-PAST-2SG
 a. Direct speech: ‘You came from work so your mother would feed you.’ (lit. ‘Saying: “Let my mother feed me” you came from work.’)
 b. Indirect speech: ‘You came from work so my mother would feed me.’ (lit. ‘Saying [that] my mother should feed me you came from work.’)

From the pragmatic point of view, interpretation (a) is no doubt preferable here.

The system of switch-reference in purposive clauses operates according to the same main principle that holds for the other types of constructions reviewed above: the same-subject marker appears only in case two coreferential nominative NPs are present; semantic features are not taken into account. See (58):

- (58) *Ø_i čilig bol-χun deēš, ool_i pečka-ni odap-kan.*
 warm be-IMP:3SG PURP boy stove-ACC heat-PF
 ‘The boy started the stove in order to get warm.’

The verb *čilig bol* ‘be warm’ requires the dative, not the nominative case, and the respective NP cannot be considered the subject NP in Tuva. For the switch-reference mechanism it means different-subject marking, in this case – the imperative-optative mood of the main verb.

Thus, there are good reasons for considering purposive constructions in Tuva as belonging to the switch-reference system. Though same- and different-subject markers in purposive constructions are different from those analyzed in previous sections, the main same-subject marker *-GAʃ* also finds its place here: the verbal form *deeʃ* shares its subject with the main clause introducing direct/indirect speech and is used as an intermediate link for maintaining the referential bond between the subjects of the main and dependent clauses.

3.4. Constructions with conjoining converbs

The examination of purposive adverbial clauses concludes the overview of multiclausal constructions that mark switch-reference along with their adverbial meanings. However, we have still not considered the constructions with the converbs in *-(I)p* and *-V/-j* that allow only same-subject usages. Forms cognate with these converbs are found in nearly all Turkic languages, and in Turkological works many pages are usually devoted to them (see, e.g., Dmitriev 1948: 187; Kononov 1956: 475–476; Gadžieva 1961; Lewis 1967: 175–178; Gadžieva 1973: 318–321; Poceluevskij 1975: 237–238; Juldašev 1977: 158–179, 185). Tuva constructions with the *-V/-j* and *-(I)p* converbs are described in much detail in Katanov (1903: 846, 850), Babuškin (1959; Isxakov–Pal’mbax (1961: 316–330). In Šamina (1985 b) they are described along with the other converb constructions conveying temporal relations. In our opinion, such a categorization is not quite justifiable and is rather motivated by the semantics of Russian translations of these constructions with the help of Russian converb phrases.

Converbs in *-V/-j* and *-(I)p* have traditionally been thought to have at least two separate types of uses (Isxakov and Pal’mbax 1961: 316). These are, first, marking the dependent clause in a multi-clausal construction, and, second, marking all nonfinal verb forms in an analytical verbal construction. In both types of uses these converbs barely have any independent meaning – they basically serve to conjoin adjacent verbs (see below); hence the term “conjoining converbs”. The two types of uses are illustrated by the following examples.

- (59) a. *ool olur-a, duŋma-zi-bile ojna-p olur-gan.*
 boy sit-CONV sister-3-with play-CONV AUX-PF
 ‘The boy is sitting and playing with his sister.’
 b. *duŋma-zi-bile ojna-p olur-a, ool igla-j ber-gen.*
 sister-3-with play-CONV AUX-CONV boy cry-CONV AUX-PF
 ‘The boy was playing with his sister and burst into tears.’

- c. *uruu kettin-ip, diran-ip tur.*
 girl:3 dress-CONV comb-CONV AUX
 'The girl is dressing and combing herself.'

In each of these examples, the verb of the first clause takes the form of a converb in *-I/-j* or *-(I)p*. At the same time, these examples illustrate the second type of use of these converbs – to mark the nonfinal verb in an analytic construction (in all three examples, this use is found in the second clause, and in [58 b] in the first clause as well: *ojnap olura*). Synchronically, these two types of uses are distinct, but we believe that they are interconnected with respect to both their genesis and their function. The original use is the first type – marking the dependent clause in multiclausal constructions which, along with those examined in section 2 above, can be called quasi-coordinate (cf. Čeremisina et al. 1986: 28, 30, 145). These constructions characterize two concrete situations as linked, combined in a certain parameter (time, place, *Aktionsart*, commonality of participants, logical sequence etc.; cf. Katanov 1903: 846). Their connectedness is iconically represented in syntax, since one of the clauses is marked as a dependent one by a converb affix. Like quasi-coordinate constructions with *-GAʃ* examined in section 2, these constructions require obligatory coreference between the subjects (all the reservations indicated for the *-GAʃ* constructions in section 2.1.3 hold true here too). However, they differ from *-GAʃ* constructions in that the meaning of temporal precedence is not necessarily present. It should be noted that the use of the converbs in *-(I)p* as final verbs of dependent clauses is typical of the literary dialect of Tuva (see Babuškin 1959: 99) and is quite rare in the Todža dialect.

As for the second type of use of the converb, i. e., analytic verb constructions, they display a different kind of connectedness: it is not a link between two specific situations in discourse but rather a context-independent semantic link between a given verbal lexeme and certain auxiliary or partially desemanticized verb. Desemanticization underlying this link can be full or partial; in accordance with that, this link can be either firm or flexible. For example, the construction *diranip tur* (lit. 'combing stands') is the most neutral, i. e., the most grammaticalized way of expressing the meaning 'she is combing'. However, under suitable semantic conditions, other wordings are possible, e. g., *diranip olur* 'she is combing in a sitting position' (lit. 'combing sits'), where the auxiliary verb has not entirely lost its lexical meaning. Such occurrences represent an intermediate case between the two types of use of the conjoining converbs. They are similar to well-known serial constructions found in African, Papuan and some other languages. In general, due to different degrees of desemanticization of the link between the main and dependent clauses, and due to the openness of the lexical

class of auxiliary verbs, the intermediate cases are not unique and cover the whole continuum of transition from multiclausal constructions with conjoining converbs to the analytic verb forms.

A possible framework for describing these two types of converb uses is the idea of Foley–Van Valin 1984 and Foley–Olson 1985 that serial constructions and coordinate clauses are nothing but two stages of the process of clause juncture that can reach different degrees of completion: (1) sharing all arguments by both predicates, as in analytic forms; (2) sharing only part of the arguments, necessarily including the main protagonist, as in the multi-clausal constructions in (59 a, 59 b); (3) sharing only the adverbial arguments (not necessarily present). Converbs in *-V/-j* and *-(l)p* do not have parallel forms that mark different-subject. Thus, like English adverbial participles and Russian converbs, they do not constitute a subsystem of switch-reference.

4. Conclusion

Let us briefly summarize the results of this study. The basis of the switch-reference system in Tuva is constituted by a pair of morphological markers *-G4ʃ* and *-Vʃr.G4* (same-subject and different-subject respectively) used in quasi-coordinate constructions (section 2). This morphological opposition also underlies a subsystem of switch-reference in causal adverbial clause constructions (section 3.2). There is also a pair of markers that express temporal adverbial clauses with the meaning of simultaneity (section 3.1) and that are partially isomorphic with the pair of basic markers, but are grammaticalized to a lesser degree. Another subsystem of switch-reference – purposive adverbial clause constructions (section 3.3) – is based on different morphological resources: the same- and different-subject status is shown on the dependent verb by means of the indicative and imperative-optative moods respectively. The last type of switch-reference marking constructions we are aware of is the construction with conjoining converbs in *-(l)p* and *-V/-j* which embraces a broad range of multiclausal structures: from an analytical verb form to a clause chain. The markers of these converbs are same-subject markers and do not have different-subject marking counterparts.

In section 1, we listed cross-linguistically frequent properties of switch-reference systems. Now we will try to compare the Tuva variant of such a system with the typological “standard” and to provide functional explanations for the properties in question.

1. In Tuva switch-reference constructions, the switch-reference markers also mark the clause as dependent. The very fact that (non)coreference of the

clause's subject with another subject is marked makes the clause dependent, requires comparing it to some other clause. Moreover, markers of switch-reference not only signal (non)coreference of the subject of the dependent clause with the subject of the main clause, but in addition express certain adverbial meanings with different degrees of specificity: from a minimally specific meaning in quasi-coordinate constructions to a highly specific meaning in purposive adverbial clauses.

2. Tuva has verb-final word order, and in a simple clause all arguments are located to the left of the verb. In accordance with this principle, the main finite verb tends to take the rightmost position in multiclausal constructions, whereas the nonfinite (frequently nominalized) clauses marking switch-reference take the argument slots to the left of the main verb.
3. The Tuva switch-reference mechanism marks (non)coreference of syntactic subjects. In cases where the referential properties of the subject are blurred, variation of switch-reference markers is possible.
4. The main same-subject marker in Tuva (*-GAʃ*) is morphologically unanalyzable while the different-subject marker (*-Vr.GA*) has an internal structure and agrees with the subject of its clause. This is quite natural since noncoreference, unlike the same-subject case, does not convey by itself any information about the subject.
5. In Tuva, the basic type of multiclausal constructions displaying switch-reference marking is what we called quasi-coordinate constructions with same- and different-subject markers in the dependent clause. These constructions show the semantically least specific link between clauses. Presumably, this is explained by the fact that switch-reference first emerges in constructions where the type of coreference is least predictable from the semantic nature of the interclausal link itself.

All that we have said above permits us to outline some perspectives for further studies on switch-reference. As for Tuva, at least the following aspects deserve to be mentioned: (1) discovering the remaining types of constructions marking switch-reference, if any; (2) an in-depth study of converb constructions (see section 3.4) and the continuous scale between analytical verb forms and multiclausal constructions with dependent converbal clauses; the relevance of the notion of serial construction to the Tuva evidence; (3) the interplay of such devices of discourse cohesion as switch-reference and anaphora (cf. Kibrik 1988 for some work in this direction).

As for Turkic studies in general, all Turkic languages should be closely examined to see whether they have switch-reference phenomena or not. Relying both on general speculations and preliminary analyses, there are reasons to suspect that switch-reference is quite typical of the Turkic language type. The contempo-

rary state of syntactic typology calls for filling this gap in our knowledge about this language family, which is in fact one of the best documented in the world.

Abbreviations

1, 2, 3	persons of subject/possessor	LOC	locative
ABL	ablative	NEG	negative
ACC	accusative	PASS	passive
AUX	auxiliary	PAST	past
CONV	converb	PF	perfective masdar
DAT	dative	PL	plural
GEN	genitive	PTCL	particle
IMP	imperative-optative	PURP	purposive
IMPF	imperfective masdar	SG	singular
INTR	interruptive aspect	SS	same subject
ITER	iterative aspect	SUF	meaningless suffix (morphophonemically induced)
DIR	directional case		
DS	different subject	TEMP	temporal clause

In the Tuva examples, we ignore zero morphemes and omit the corresponding glosses, like nominative case marker, third person agreement.

Notes

- * This paper is slightly revised translation of an article originally published in Russian (M. B. Bergelson–A. A. Kibrik. 1987. "Sistema pereključenija referencii v tuvinskom jazyke", *Sovetskaja tjurkologija* 1987 (2): 16–32; 1987 (4): 30–45).

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Tuva is a Turkic language spoken in southern Siberia (mostly in the Tuva republic, a part of the Russian Federation) by approximately 207,000 speakers (1989 census). In English the Tuva language has been variously called Tuvan, Tuvian, Tuvian, Tuvian, as well as a number of older names (see Comrie 1992: 190). The Tuva people call their language *tiva dil*. Tuva is a member of the Northern (Eastern-Hunnic) branch of the Turkic family. The grammatical structure of Tuva is mostly within the limits of the Turkic "standard", but includes some features shared by other Turkic, Tungusic and Mongolian languages of the area. The lexicon displays a strong influence from Mongolian. The standard Tuva orthography is based on the Cyrillic alphabet. Here we use a transliteration system fairly common in Turkic studies (see, e.g., Comrie 1981). The character *i* represents a high back unrounded vowel; *i'*, *a'* etc. are pharyngealized vowels; *j* is a palatal voiced fricative.

This paper is based on data collected by the authors in the 1986 linguistic expedition of Moscow State University in Tuva (Todža district, the village of Ij). Except for the cases specifically indicated, all Tuva examples were elicited from our consultants in the village of Ij, who speak the Todža dialect of Tuva (see Čadamba 1974). Checking our materials with the speakers of the literary dialect of Tuva showed that the Todža dialect does not differ significantly from the literary dialect in the relevant aspects. The cases of divergence between dialects are indicated in the paper. We have occasionally used data from written Tuva texts, as well as from the works of other authors. Such cases are indicated.

We are happy to express our gratitude to our consultants – the schoolteachers from the village of Ij, and also our colleagues Ul'jana P. Opej-ool and Marina V. Monguš, who helped us to correct and supplement our data. We thank the members of the Tuva linguistic expedition who discussed with us certain aspects of the present work, and we are very thankful to Aleksandr E. Kibrik, Antonina I. Koval, Isaak Š. Kozinsky, Maria S. Polinsky, Edgem R. Tenišev, Yakov G. Testelec, and Viktoriya N. Yartseva, who read an early version of the article and made valuable comments. We also highly appreciate the help of Thomas Payne who provided us with some important information. Keith Slater suggested a number of stylistic improvements, for which we are very much indebted to him. Naturally, all mistakes and omissions are our own responsibility.

1. True, there are marginal examples of noncoreferentiality of subjects of the participial and main clauses in English, e.g. *John having carefully set the trap, Bill waited patiently behind the tree for the bear* (we owe this example to Robert D. Van Valin). To ensure such noncoreferentiality, however, there should be an overt NP in the participial clause; the absence of a noun phrase is equivalent, by default, to coreferentiality.
2. There are well-known examples of correct Russian sentences with converbs where the subjects are not, strictly speaking, coreferential (see, e.g., Bergel'son 1979). In fact, Russian converbs are no less complicated than the Tuva converbs discussed below. The Russian data are cited here simply for illustrative purposes.
3. Stirling 1993 appeared after the revised version of this paper was finished, so we could not take it into account.
4. Two notes are due here:
 - (a) *Kara-kyz* ('Black girl') is one of the most common Tuva female names (below we will also meet the common male name *Kara-ool* 'Black boy');
 - (b) in the second clauses of (3a–b), one can see that the verb forms are the analytic ones, i.e., they consist of a lexically full verb in the converb form in *-ip* plus an auxiliary verb in a finite form. This kind of analytic structure is highly typical of Tuva texts; we will deal with the analytic structures in more detail in section 3.4.
5. Following Turkological tradition, we use a morphophonemic transcription for affixes where capitals indicate morphophonemes that can be realized differently on the surface, depending on the context. For example, the morphophoneme *A* can show up as *a* or *e* because of vowel harmony, depending on the stem vowel; the morphophoneme *G* surfaces as *g*, *k*, and sometimes zero.
6. Although the term "converb" (*deepričastie*) was originally brought into Turkic linguistics from the Russian grammatical tradition, the requirement of coreferentiality of the main clause and dependent clause subjects is not usually implied by its usage in Turkic studies; see Čeremisina (1977).
7. On the difference between agreement affixes on masdars and regular nouns see Čeremisina (1981: 34).

8. It should be noted that a more natural translation of such sentences in English would be something like “Kara-ool’s father will leave and Kara-ool will go to sleep” but we stick here and below to a translation more isomorphic to the Tuva construction; in contrast to English, the preferred interpretation of such Tuva sentences is that it is Kara-ool who is the father’s son.
9. This example was elicited from a speaker of the literary dialect of Tuva. For the speakers of the Todža dialect such sentences are unacceptable. In Todža biclausal constructions of the type in question, one of the clauses can be made passive only if there is a strong motivation to topicalize the patient – to make it a passive subject; such a motivation can appear only if the second clause includes an argument coreferential with this patient subject, which is not the case in (22).
10. Our informants do not agree on the stylistic value of the same-subject variants of such sentences. Different forms are preferred on different occasions. The unsystematic nature of these preferences perhaps indicates that they are not motivated in every single case, but only reflect the informants’ intuitions about the somewhat marginal status of these constructions.
11. This example with the same-subject form was taken from the written text of a Tuva fairy tale. The different-subject variant was checked with an informant.
12. Examples (25)–(26) are from a speaker of the standard dialect.
13. This example is from Babuškin (1959: 101).
14. Although it is, of course, not necessary (and actually does not occur often in practice) that both NPs are overt.
15. This example, as well as the other examples in the remainder of section 2.1.3 are from a speaker of the standard dialect.
16. As has been observed by Maria S. Polinsky (personal communication), the possibility of the same-subject marker in example (37 a) (and its impossibility in [37 b]) can also be explained differently, namely by the existence of an associative link between the concepts of “spring” and “flowers”; such links are similar to referential relations like part/whole, which were considered above. In general, for some uses of same-subject markers in the context of incomplete coreference one can imagine a somewhat different treatment, based not on the nonprototypicality of subjects, but on the discovery of various relations of similarity and link between subjects; simple coreference is a special case of such relations.
17. *-BAS* is the negative variant of the imperfective masdar marker *-Vr*.
18. Indeed, such a combination exists, but in a completely different function: to mark a sentential complement of a verb that requires a dative object.
19. The word group *with a quick pace*, formally an instrumental/manner NP, can be viewed as a reduction of the predication “he paced quickly”.
20. This example was taken from the written text of a Tuva fairy tale and was checked with an informant.
21. Example from Babuškin (1960: 137).
22. Example from Babuškin (1960: 129).
23. The last two examples are from Šamina (1982: 67–68).

References

Note: *UZ TNIIJaLI* = *Učenyje zapiski Tuvinskogo naučno-issledovatel'skogo instituta jazyka, literatury i istorii, Kyzyl*.

Austin, Peter

1981 "Switch-reference in Australia", *Language* 57: 309–334.

Austin, Peter (ed.)

1988 *Complex constructions in Australian languages*. (Typological Studies in Language 15.) Amsterdam: Benjamins.

Babuškin, Georgij F.

1959 "O značenijax i sintaksičeskix funkcijax deepričastij v tuvinskom jazyke" [On the meanings and syntactic functions of converbs in Tuva], *UZ TNIIJaLI* 7: 93–104.

1960 "O strukture pridatočnyx predloženij v tuvinskom jazyke" [On the structure of subordinate sentences in Tuva], *UZ TNIIJaLI* 8: 127–138.

Baskakov, Aleksandr N.

1984 *Predloženie v sovremennom tureckom jazyke* [The sentence in modern Turkish]. Moscow: Nauka.

Baskakov, Nikolaj A.

1975 *Istoriko-tipologičeskaja xarakteristika struktury tjurkeskix jazykov* [A historical-typological characterization of the structure of Turkic languages]. Moscow: Nauka.

Bergel'son, Mira B.

1979 *O javlenii sintaksičeskoj redukcii v russkom jazyke* [On the phenomenon of syntactic reduction in Russian]. [Diploma thesis, Moscow State University.]

1986 "Ispol'zovanie strategij pri proizvodstve i ponimanii sočinennyx konstrukcij" [The use of strategies in producing and understanding coordinate constructions], in: *Tezisy konferencii molodyx vostokovedov* [Abstracts of the conference of junior orientalists]. Moscow: IVAN SSSR, 18–21.

Bright, William (ed.)

1992 *International encyclopedia of linguistics*. New York: Oxford University Press.

Čadamba, Zoja B.

1974 *Todžinskij dialekt tuvinskogo jazyka* [The Todža dialect of Tuva]. Kyzyl.

Carlson, Robert

1987 "Narrative connectives in Supyire", in: Russ Tomlin (ed.), 1–19.

Čeremisina, Majja I.

1977 "Deepričastija kak klass form glagola v jazykax raznyx sistem" [Converbs as a class of verb forms in structurally diverse languages], in: Majja I. Čeremisina (ed.) 1977, 3–28.

1979 *Nekotorye voprosy teorii složnogo predložennja v jazykax raznyx sistem* [Several questions of the theory of the complex sentence in structurally diverse languages]. Novosibirsk: Sibirskoe otdelenie AN SSR.

1980 "Monosub'ektnaja konstrukcija: Ponjatie i tipologija" [Same-subject construction: The concept and a typology], in: Majja I. Čeremisina (ed.) 1980 a, 6–33.

1981 "Predikativnoe sklonenie kak baza zavisimoj predikacii v altaiskix jazykax" [The predicative declension as the basis of dependent predication in Altaic languages], in: Majja I. Čeremisina (ed.) 1981 a, 12–38.

Čeremisina, Majja I (ed.)

- 1977 *Složnoe predloženie v jazykax raznyx sistem* [The complex sentence in structurally diverse languages]. Novosibirsk: Nauka.
- 1979 *Infinitnye formy glagola* [Nonfinite forms of the verb]. Novosibirsk: Nauka.
- 1980 a *Polipredikativnye konstrukcii i ix morfoložičeskaja baza (na materiale sibirskix i evropejskix jazykov)* [Multipredicate constructions and their morphological base (using data from Siberian and European languages)]. Novosibirsk: Nauka.
- (1980 b) *Analiitičeskie sredstva svjazi v polipredikativnyx konstrukcijax* [Analytical means of linking in multipredicate constructions]. Novosibirsk: Nauka.
- 1981 a *Padeži i ix ekvivalenty v stroe složnogo predloženiya v jazykax narodov Sibiri* [Cases and their equivalents in the structure of the complex sentence in the languages of Siberian peoples]. Novosibirsk: Nauka.
- 1981 b *Sintaksis altajskix i evropejskix jazykov* [The syntax of Altaic and European languages]. Novosibirsk: Nauka.
- 1982 *Strukturnye i funkcional'nye tipy složnyx predloženij (na materiale jazykov Sibiri)* [Structural and functional types of complex sentences (using data from Siberian languages)]. Novosibirsk: Nauka.
- 1983 *Tjurkskie jazyki Sibiri* [Turkic languages of Siberia]. Novosibirsk: Nauka.

Čeremisina, Majja I. et al.

- 1984 *Predikativnoe sklonenie pričastij v altajskix jazykax* [The predicative declension of participles in Altaic languages]. Novosibirsk: Nauka.
- 1986 *Strukturnye tipy sintetičeskix polipredikativnyx konstrukcij v jazykax raznyx sistem* [Structural types of synthetic multipredicate constructions in structurally diverse languages]. Novosibirsk: Nauka.

Čeremisina, Majja I.–Ljudmila A. Šamina–Tat'jana N. Borgojakova

- 1984 "Tuvinskij jazyk" [The Tuva language], in Majja I. Čeremisina et al. 1984 a (chapter 6, § 2, section 2).

Cole, Peter

- 1983 "Switch-reference in two Quechuan languages", in: John Haiman–Pamela Munro (eds.), 1–16.

Comrie, Bernard

- 1981 *The languages of the Soviet Union*. Cambridge: Cambridge University Press.
- 1992 "Turkic languages", in: William Bright (ed.), Vol. 4, 187–190.

Delger-ool, A. K.

- 1960 "Osnovnye tipy glagol'nyx oborotov v tuvinskom predložении" [Main types of verbal constructions in the Tuva sentence], *UZ TNUJAL* 8: 118–126.

Dmitriev, Nikolaj K.

- 1948 *Grammatika baškirskego jazyka* [Grammar of the Bashkir language]. Moscow–Leningrad: Izdatel'stvo AN SSSR.

Efremov, Nikolaj N

- 1979 "O parnosti monosub'ektnyx i raznosub'ektnyx jakutskix temporal'nyx polipredikativnyx konstrukcij" [On the pairedness of same-subject and different-subject temporal multipredicate constructions in Yakut], in: Majja I. Čeremisina (ed.) 1979, 59–74.
- 1981 "Složnopodčinennye predloženiya jakutskogo jazyka, vyražajuščie prostuju odnovremennost'" [Subordinate sentences expressing simple simultaneity in Yakut], in: Majja I. Čeremisina (ed.) 1981 b, 51–59.

- Foley, William A.–Robert D. Van Valin Jr.
1984 *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- Foley, William A.–Michael Olson
1985 "Clausehood and verb serialization", in: Anthony Woodbury–Johanna Nichols (eds.), *Grammar inside and outside the clause*. Cambridge: Cambridge University Press, 17–60.
- Franklin, Karl J.
1983 "Some features of interclausal reference in Kewa", in: John Haiman–Pamela Munro (eds.), 39–50.
- Gadžieva, Ninel' Z.
1957 "Kriterii vydelenija pridatočnyx predloženíj v tjurkskix jazykax" [Criteria for identifying subordinate sentences in Turkic languages], *Voprosy jazykoznanija* 1957 (3): 112–118.
1961 "Tipologija pridatočnyx predloženíj v sovremennom azerbajdžanskom jazyke" [Typology of subordinate sentences in modern Azerbaijani], in: Ėrvand V. Sevortjan (ed.), 164–221.
1973 *Osnovnye puti razvitiia sintaksičeskoj struktury tjurkskix jazykov* [Main paths of development of the syntactic structure of Turkic languages]. Moscow: Nauka.
- Gadžieva, N. Z.–Birjukovič, R. M.
1983 "Relikty drevnetjurkskogo sintaksisa v sovremennyx tjurkskix jazykax" [Relics of Old Turkic syntax in modern Turkic languages], *Sovetskaja Tjurkologija* 1983 (2): 3–15.
- Genetti, Carol
1990 *A descriptive and historical account of the Dolakha Newari dialect*. [Ph.D. dissertation, University of Oregon, Eugene.]
- Gorelova, Lilija M.
1980 "Modeli polipredikativnyx konstrukcij v èvenkijskom jazyke" [Models of multipredicate constructions in Evenki], in: Majja I. Čeremisina (ed.) 1980 a, 83–96.
- Grunina, Ėlvira A.
1961 "Nekotorye voprosy sintaksisa složnopodčinenogo predložénija v sovremennom literaturnom uzbekskom jazyke" [Several questions of the syntax of the subordinate sentence in modern standard Uzbek], in: Ėrvand V. Sevortjan (ed.), 135–163.
- Haiman, John
1983 "On some origins of switch-reference marking", in: John Haiman–Pamela Munro (eds.), 105–128.
- Haiman, John–Sandra A. Thompson
1984 "'Subordination' in universal grammar", *Berkeley Linguistics Society* 10: 510–523.
- Haiman, John–Pamela Munro (eds.)
1983 *Switch-reference and universal grammar*. (Typological Studies in Language 2.) Amsterdam: Benjamins.
- Haiman, John–Sandra A. Thompson (eds.)
1988 *Clause combining in grammar and discourse*. (Typological Studies in Language 18.) Amsterdam: Benjamins.
- Hanser, O.
1982 "Der Streit um den türkischen Nebensatz unter besonderer Berücksichtigung der Sowjettürkologie", *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 132 (2): 308–335.
- Isxakov, Fazył G.–Pal'mbax, Aleksandr A.
1961 *Grammatika tuvinskogo jazyka* [Grammar of the Tuva language]. Moscow: Izdatel'stvo vostočnoj literatury.

Iwasaki, Shoichi

- 1992 *Subjectivity in grammar and discourse: Theoretical considerations and a case study of Japanese spoken discourse*. (Studies in Discourse and Grammar 2.) Amsterdam: Benjamins.

Jacobsen, William Jr.

- 1967 "Switch-reference in Hokan-Coahuiltecan", in: D. Hymes–W. Bittle (eds.), *Studies in Southwestern ethnolinguistics: Meaning and history in the languages of the American Southwest*. The Hague: Mouton, 238–263.

- 1983 "Typological and genetic notes on switch-reference systems in North American Indian languages", in: John Haiman–Pamela Munro (eds.), 151–184.

Juldašev, Axnef A.

- 1977 *Sootnošenie deepričastnyx i ličnyx form glagola v tjurkskix jazykax* [The relation between converbal and personal verb forms in Turkic languages]. Moscow: Nauka.

Katanov, Nikolaj F.

- 1903 *Opyt issledovanija urjanxajskogo jazyka s ukazaniem glavnejšix rodstvennyx otnošenij ego k drugim jazykam tjurkskogo kornja* [An attempt at studying the Urjanxa language with information on its main genetic relationships with other languages on the Turkic root]. Kazan'.

Kibrik, Andrej A.

- 1988 "Sistema pereključenija referencii i anafora v tuvinskom jazyke" [The system of switch reference and anaphora in Tuva], in: *Grammatičeskie sredstva oformlenija anaforičeskix svjazej*. Dissertacija KFN. Moscow.

Kibrik, Aleksandr E.

- 1979 "Podležaščee i problema universal'noj modeli jazyka [The subject and the problem of a universal model of language], *Izvestija AN SSSR, SLJa* 1979 (4): 309–318.

Kononov, Andrej N.

- 1956 *Grammatika sovremennogo tureckogo literaturnogo jazyka* [Grammar of modern standard Turkish]. Moscow–Leningrad.

- 1960 *Grammatika sovremennogo uzbekeskogo literaturnogo jazyka* [Grammar of modern standard Uzbek]. Moscow–Leningrad.

Lewis, G. L.

- 1967 *Turkish grammar*. Oxford: Oxford University Press.

Longacre, Robert E.

- 1983 "Switch-reference systems in two distinct linguistic areas: Wajokeso (Papua New Guinea) and Guanano (Northern South America)", in: John Haiman–Pamela Munro (eds.), 185–208.

Lynch, John

- 1983 "Switch-reference in Lenakel", in: John Haiman–Pamela Munro (eds.), 209–222.

Mithun, Marianne

- 1993 "‘Switch reference’: Clause combining in Central Pomo", *International Journal of American Linguistics* 59 (3).

Munro, Pamela (ed.)

- 1980 *Studies on switch-reference*. (UCLA Papers in Syntax, Vol. 8.) Los Angeles: Department of Linguistics, UCLA.

Myhill, John–Junko Hibiya

- 1988 "The discourse function of clause-chaining", in: John Haiman–Sandra A. Thompson (eds.), 361–398.

Nartjev, N.

- 1975 "Složnopodčinennoe predloženie v tjurkskix jazykax" [The subordinate sentence in Turkic languages], *Sovetskaja tjurkologija* 1975 (5): 12–20.

Nedjalkov, Vladimir P.

this volume "Some typological parameters of converbs".

Nichols, Johanna

1979 "Syntax and pragmatics in Manchu-Tungus languages", in: P. R. Clyne et al. (eds.) *The elements: A parasection on linguistic units and levels*. Chicago: Chicago Linguistic Society, 420–428.

1983 "Switch-reference in the Northeast Caucasus", in: John Haiman–Pamela Munro (eds.), 245–266.

Padučeva, Elena V.

1985 *Vyskazyvanie i ego sootnesennost' s dejstvitel'nost'ju* [The utterance and its correlatedness with reality]. Moscow: Nauka.

Poceluevskij, Aleksandr P.

1975 "Osnovy sintaksisa turkmenskogo literaturnogo jazyka" [Foundations of standard Turkmenian syntax], in: *Izbrannye trudy*. Ašxabad: Ylym.

Šamina, Ljudmila A.

1980 "Sposoby vyraženiya pričinnyx otnošenij v tuvinskom jazyke" [Ways of expressing causal relations in Tuva], in: Majja I. Čeremisina (ed.) 1980 b, 12–30.

1981 "Pričastno-posleložnye konstrukcii zavisimoj časti tuvinskix složnopolčinennyx predloženiij vremeni" [Participial-postpositional constructions of the dependent of Tuva subordinate temporal clauses], in: Majja I. Čeremisina (ed.) 1981 a, 98–111.

1982 "Konstrukcii obščej vremennoj sootnesennosti v tuvinskom jazyke" [Constructions of general temporal correspondence in Tuva], in: Majja I. Čeremisina (ed.) 1982, 61–79.

1983 "O modeljax tuvinskix složnyx predloženiij s formoj na -gyže v zavisimoj časti" [On the models of Tuva complex sentences with the form in -gyže in the dependent], in: Majja I. Čeremisina (ed.) 1983, 36–45.

1985 a "Pričinnyx konstrukcii v tuvinskom jazyke" [Causal constructions in Tuva], in: *Tjurkskoe jazykoznanie: Materialy III Vsesojuznoj tjurkologičeskoj konferencii*. Taškent, 200–203.

1985 b *Strukturnye i funkcional'nye tipy polipredikativnyx konstrukcij so značeniem vremeni v tuvinskom jazyke* [Structural and functional types of multipredicate constructions with temporal meaning in Tuva] Ph. D. dissertation, Novosibirsk.

Sat, Šuluu Č.

1955 *Tuvinsko-russkij slovar'* [Tuva-Russian dictionary]. Moscow.

1960 *Sintaksičeskie funkcii pričastij v tuvinskom jazyke* [Syntactic functions of participles in Tuva]. Kyzyl: Tuvknigoizdat.

1981 "Rol' služebnyx slov *dep*, *deš* v složnopolčinennom predložении tuvinskogo jazyka" [The role of the function words *dep*, *deš* in the subordinate sentence in Tuva], in: Majja I. Čeremisina (ed.) 1981, 112–115.

1982 "Pridatočnye predikativnye edinicy v tuvinskom jazyke" [Subordinate predicative units in Tuva], in: Majja I. Čeremisina (ed.) 1982, 48–60.

Sevortjan, Ėrvand V. (ed.)

1961 *Issledovanija po sravnitel'noj grammatike tjurkskix jazykov* [Studies in the comparative grammar of the Turkic languages]. Vol. 3. Moscow: Nauka.

Skrjbnik, Elena K.

1980 "O sisteme deepričastij v sovremenном burjatskom jazyke" [On the system of converbs in modern Buryat]. Novosibirsk: Nauka, 94–110.

Stirling, Leslie

1993 *Switch reference and discourse representation*. Cambridge: Cambridge University Press.

Švedova, Natal'ja Ju. et al.

1980 *Russkaja grammatika* [Russian grammar]. Vol. 2. Moscow: Nauka.

Tekin, Talat

1968 *A grammar of Orkehon Turkic*. (Indiana University Publications 69.) Bloomington: Indiana University.

Tomlin, Russ (ed.)

1987 *Coherence and grounding in discourse*. (Typological Studies in Language 11.) Amsterdam: Benjamins.

Ubrjatova, Ekaterina I.

1976 *Issledovanija po sintaksisu jakutskogo jazyka. Č. 2: Složnoe predloženie* [Studies in Yakut syntax. Part 2. The complex sentence]. Novosibirsk: Nauka.

Underhill, Robert

1972 "Turkish participles", *Linguistic Inquiry* 3 (1): 87–99.

1976 *Turkish grammar*. Cambridge, MA: The MIT Press.

Wiesemann, Ursula

1987 "Grammaticalized coreference", in: Ursula Wiesemann (ed.), 437–463.

Wiesemann, Ursula (ed.)

1987 *Pronominal systems*. Tübingen: Narr.

Wilkins, David

1988 "Switch-reference in Mparntwe Arrernte (Aranda): Form, function, and problems of identity", in: Peter Austin (ed.), 141–176.

Woodbury, Anthony C.

1983 "Switch-reference, syntactic organization and rhetorical structure in Central Yup'ik Eskimo", in: John Haiman–Pamela Munro (eds.), 291–316.

Contextual and specialized converbs in Lezgian

Martin Haspelmath

1. Introduction

Lezgian is spoken by more than 400,000 people in southern Daghestan and northern Azerbaijan, in the northeastern Caucasus. It belongs to the Nakh-Daghestanian language family (sometimes called Northeastern Caucasian). Like the other Nakh-Daghestanian languages, Lezgian exhibits a number of morpho-syntactic features that are widespread elsewhere in northern Asia and in South Asia (especially in eastern Uralic, Turkic, Mongolian, Korean, Japanese, Tungusic, and Dravidian): rich suffixing agglutinating morphology, consistently head-final word order, nonfinite subordination.¹

Given these features, it comes as no surprise that Lezgian is also rich in nonfinite verbal forms that are specialized for adverbial subordination, i. e., converbs. Interestingly, Lezgian has both contextual converbs (i. e., converbs that leave the precise nature of the semantic link between the clauses open) and specialized converbs (i. e., converbs with a quite specific adverbial meaning). Section 2 of this paper describes the two contextual converbs, the imperfective converb and the aorist converb. Section 3 describes the various specialized converbs, and section 4 discusses the control properties of Lezgian converbal constructions.

In the remainder of this introduction, I will briefly outline the main properties of Lezgian verbal morphology.² Lezgian verbs can be divided into two inflectional classes: weak verbs, which lack a thematic vowel, and strong verbs, whose stems end in a thematic vowel. Inflected forms are based on one of three stems: the masdar stem, the imperfective stem, and the aorist stem. The three stems are distinguished only in strong verbs by means of different thematic vowels, as Table 1 reveals.

Different inflected forms are derived from different stems. A sample of the most important forms is given in Table 2 (paradigm verb *gun* 'give').

As can be seen in Table 2, negative forms are created by means of the suffix *-ɛ̃* in indicative finite forms, and by means of the prefix *ɪV-* (in this case *ta-*) in nonfinite forms (masdar, converbs) and in nonindicative forms (optative, hortative). Past forms are characterized by the suffixes *-j* (affirmative) or *-ir* (after negative *-ɛ̃*).

Table 1. The three stems of strong and weak verbs

	Strong verb <i>gun</i> 'bring'	Strong verb <i>at'un</i> 'cut'	Strong verb <i>q^bürün</i> 'laugh'	Weak verb <i>balun</i> 'drive'
Masdar stem	<i>ḡ-u-</i>	<i>at'-u-</i>	<i>q^bür-ü-</i>	<i>bal-</i>
Imperfective stem	<i>ḡ-i-</i>	<i>at'-u-</i>	<i>q^bür-e-</i>	<i>bal-</i>
Aorist stem	<i>ḡ-a-</i>	<i>at'-a-</i>	<i>q^bür-e-</i>	<i>bal-</i>

Table 2. Inflected forms of *gun* 'give'

	Affirmative	Negative	Gloss of affirmative form
<i>Masdar stem</i>	<i>ḡ-u-</i>		
Masdar	<i>gun-n</i>	<i>ta-gun-n</i>	'give, giving'
Optative	<i>gun-raj</i>	<i>ta-gun-raj</i>	'may ... give'
Imperative	<i>æ</i> (suppletive)	—	'give!'
<i>Imperfective stem</i>	<i>ḡ-u-</i>		
Imperfective	<i>gu-ṣwa</i>	<i>gu-ṣwa-ē</i>	'is giving'
Past Imperfective	<i>gu-ṣwa-j</i>	<i>gu-ṣwa-ē-ir</i>	'was giving'
Future	<i>gu-da</i>	<i>gu-da-ē</i>	'will give'
Past Future	<i>gu-da-j</i>	<i>gu-da-ē-ir</i>	'would give'
Hortative	<i>gu-n</i>	<i>ta-gun-n</i>	'let's give'
Imperfective converb	<i>gu-ṣ</i>	<i>ta-gun-ṣ</i>	'giving'
Prohibitive	<i>gu-mir</i>	—	'don't give!'
Posterior converb	<i>gu-daldi</i>	—	'before giving'
<i>Aorist stem</i>	<i>ḡ-a-</i>		
Aorist	<i>ga-na</i>	<i>ga-na-ē</i>	'give'
Past Aorist	<i>ga-na-j</i>	<i>ga-na-ē-ir</i>	'had given'
Perfect	<i>ga-nwa</i>	<i>ga-nwa-ē</i>	'has given'
Past Perfect	<i>ga-nwa-j</i>	<i>ga-nwa-ē-ir</i>	'had given'
Aorist converb	<i>ga-na</i>	<i>ta-ga-na</i>	'having given'

An important class of inflected forms omitted from Table 2 are participles. These are derived from non-past finite indicative forms by means of the suffix *-j*. Since they are nonfinite, the corresponding negative forms have the prefix *tV-*. Only the aorist participle is derived directly from the aorist stem (suffix *-ji/-j/-r*). See Table 3.

Note that the affirmative form of three of the participles are homophonous with the corresponding finite past forms.

Table 3. Participles of *gun* 'give'

	Affirmative	Negative	Gloss of affirmative form
Imperfective participle	<i>gu-ɣwa-j</i>	<i>ta-gu-ɣwa-j</i>	'giving'
Future participle	<i>gu-da-j</i>	<i>ta-gu-da-j</i>	'about to give'
Aorist participle	<i>ga-ji</i>	<i>ta-ga-j</i>	'(having) given'
Perfect participle	<i>ga-nwa-j</i>	<i>ta-ga-nwa-j</i>	'(having) given'

2. Contextual converbs

The two contextual converbs are the imperfective converb (e. g., *gu-ɣ*) and the aorist converb (e. g., *ga-na*). These correspond more or less to the simultaneous and anterior converbs of other European languages:

(1)	Lezgian	English	French	Russian
	<i>gu-ɣ</i>	<i>giving</i>	<i>donnant</i>	<i>davaja</i>
	<i>ga-na</i>	<i>having given</i>	<i>ayant donné</i>	<i>dav</i>

2.1. The imperfective converb

2.1.1. Main uses of the imperfective converb

The imperfective converb is marked by the suffix *-ɣ* and expresses a simultaneous situation that accompanies the main clause situation. For example:³

- (2) a. *Am ajwandi-k gazet k'el-iɣ aɣwax-nawa*
 he:ABS balcony-SBESS [newspaper read-IMC] stand-PERF
 'He is standing on the balcony, reading a newspaper.' (G54:179)
- b. *Cükwer sa šumud juḡu-ɣ ja ksu-n t-iji-ɣ*
 Cükwer one several day-DAT [or sleep-PER NEG-do-IMC]
ja ne-n t-iji-ɣ k'wal-äj eḡel'-na-č
 [or eat-PER NEG-do-IMC] house-INEL go.out-AOR-NEG
 'For several days Cükwer did not go out of the house, neither sleeping nor eating.' (S88:34)
- c. *Kaci, wiči-n jarḡi spel-ri-waj paɕ güc'-iɣ*
 cat(ERG) [self-GEN long whisker-PL-ADEL paw stroke-IMC]
kic'i-waj xabar q'u-na: Wuč xabar ja?
 dog-ADEL news hold-AOR what news COP
 'The cat, stroking its long whiskers with its paw, asked the dog: What's the news?' (K90,12:2)

As with simultaneous converbs in other languages, the subordinate event may be just another way of viewing the main clause event, i.e., the converbal construction expresses the manner of the main event.

- (3) a. *Q'aq'an caw-a leq're čarx-ar jağ-iz luw*
 high sky-INESS eagle(ERG) [circle-PL strike-IMC] wing
gu-Ɂwa-j
 give-IMPF-PAST
 'In the high sky, an eagle was flying, describing circles.' (J89:20)
- b. *AɁpa aburu-waj, lap atabuba-jri-laj egeč-iz, wert-eri-laj*
 then they-ADEL [very ancestor-PL-SREL start-IMC hen-PL-SREL
k'ek-eri-laj xkeč-iz, Ɂuzun-ar awu-na.
 rooster-PL-SREL get.out-IMC] question-PL do-AOR
 'Then he asked them questions, starting with their ancestors, ending with chickens and roosters.' (Q81:112)

It is often difficult to distinguish these two cases from each other and from a third type where the subordinate event can be regarded as a kind of instrument for carrying out the main-clause event.

- (4) a. *Ada sar-ari-k kuta-Ɂ k'erec-ar xa-da.*
 he(ERG) [tooth-PL-SBESS put.under-IMC] nut-PL break-FUT
 'He breaks nuts by putting them under his teeth.' (Š83:52)
- b. *Za q'eb eč'äğ-iz, Ɂweč'i wax axwara-l raqur-na.*
 I:ERG [cradle rock-IMC] little sister sleep-SRESS send-AOR
 'By rocking the cradle, I sent my little sister to sleep.' (K89,12:11)

Occasionally the imperfective converb expresses a situation that is not apparently conceptually subordinate to the main clause situation, so that the only possible translation is by means of 'and'.

- (5) a. *Ha ik' jis-ar qwe-Ɂ alat-na.*
 that thus year-PL [come-IMC] pass-AOR
 'Thus the years came and went by.'
- b. *Aburu q'ül-er iji-Ɂ mani-jar luhu-Ɂwa-j.*
 they(ERG) [dance-PL do-IMC] song-PL say-IMPF-PAST
 'They were dancing and singing.' (S88:40)

The imperfective converb is commonly used in a fully reduplicated form in the accompaniment/manner/instrument sense. This usage is similar to several Turkic languages (cf. Johanson, this volume), and it could well be a borrowing from Turkic.

- (6) a. *Abur q'wed-ni insan-ri-n aradaj čuq'we-ž=čuq'we-ž*
 they two-also [person-PL-GEN between press-IMC=press-IMC]
tribunadi-n pataw fe-na.
 tribune-GEN to go-AOR
 'They both went to the tribune, pushing their way through the people.' (J89:27)
- b. *Am küčed-aj, ič ne-ž=ne-ž, fi-žwa-j.*
 he:ABS street-INEL [apple eat-IMC=eat-IMC] go-IMPF-PAST
 'He went along the street, eating an apple.' (G54:179)

2.1.2. Some special uses of the imperfective converb

Lezgian has two kinds of copulas: the standard copula *ja*, which is used with nominal and adjectival predicates (*X ruš ja* 'X is a girl'; *X aq'ullu ja* 'X is smart'), and a series of local copulas, which are used with adverbial predicates: *awa* 'be in', *gwa* 'be at', *gala* 'be behind', *kwa* 'be under', *ala* 'be on' (e.g., *X ktabda awa* 'X is in the book'). The imperfective converb of all the copulas is used extensively, and it often corresponds to different constructions in European languages.

The imperfective converb of the standard copula, *ja-ž* 'being', often corresponds to *as* when it is used with a nominal predicate. In (7 b), a causal relation can be inferred.

- (7) a. *Küne ža-ž ražur-a, ža am badedi-ž*
 you.all:ERG I-DAT send-IMPV I:ERG it:ABS grandmother-DAT
sawq'wat ja-ž gu-da.
 [gift be-IMC] give-FUT
 'Send it to me, I will give it to grandmother as a gift.' (K86,2:8)
- b. *Universitetdi-n rektor ja-ž ža aburu-ž kümek-ar*
 [university-GEN president be-IMC] I:ERG they-DAT help-PL
gu-žwa.
 give-IMPF
 'As the president of the university, I am helping them.' (DD71,3:18)

When used with an adjectival predicate, *ja-ž* corresponds to a depictive copredicative adjective in the translation (cf. also example [11] below).

- (8) a. *Sa seferd-a šafiga tarsuni-ž sefil ja-ž ata-na.*
 one time-INESS šafiga lesson-DAT [sad be-IMC] come-AOR
 'Once šafiga came to a lesson sad.' (lit. 'being sad') (N88:82)
- b. *Perixan ġamlu ja-ž acuq'-nawa-j.*
 Perixan [sorrowful be-IMC] sit-PERF-PAST
 'Perixan was sitting sorrowful.' (lit. 'being sorrowful') (G63:140)

While the subject of the imperfective converb is generally omitted and controlled by a main clause argument, the imperfective converb of a local copula often has a subject of its own.⁴ In the translation, a verbless free adjunct is generally preferable to an expression with *being*.

- (9) a. *Axpə, čin-a gab q^bwer awa-ʒ, gab q'il galtad-iʒ,*
 then [face-INNESS now smile be.in-IMC] [now headshake-IMC]
am ʒa-q^b galaʒ raxa-na
 he:ABS I-POESS with talk-AOR
 'Then he talked to me, now with a smile on his face, now shaking his head.' (K86,2:8)
- b. *Ağa deredi-n k'an-äj lacu kaf ala-ʒ wat'*
 low valley-GEN ground-INEL [white foam be.on-IMC] river
kat-ʒawa.
 run-IMPF
 'A river runs along the ground of the lower valley, with white foam on it.' (M83:73)
- c. *Abur q'wed-ni qün qün-e awa-ʒ küced-aj*
 they two-also [shoulder shoulder-INNESS be.in-IMC] street-INEL
ağuz q^bfe-na.
 down go.back-AOR
 'They both went back down the street, shoulder on shoulder.' (N88:89)

Often the adverbial phrase is lacking in such a converbal construction. In these cases the converbal phrase is best translated by a prepositional phrase with *with* or (when the converb is negated) *without*.

- (10) a. *Zun Bukar xaludi-n q'iliv ruʒa-ni gwa-ʒ ata-na*
 I:ABS Bukar uncle-GEN to [rifle-also be.at-IMC] come-AOR
 'I came to Bukar-khalu with a rifle, too.'
- b. *Pačah awa-č-iʒ čun hik' dulanmiš ʒe-da?*
 [king be-NEG-IMC] we:ABS how living be-FUT
 'How shall we live without the king?' (lit. 'the king not being [there]') (HQ89:10)
- c. *Mažib gala-č-iʒ hik' dulanmiš ʒu-raj?*
 [salary be.behind-NEG-IMC] how live be-OPT
 'How can one live without a salary?' (Ko89,10,18:4)

Such expressions already border on converb-derived postpositions. On the grammaticalization of converbs into postpositions, see further in section 5.3 below.

The imperfective converb suffix may also be attached to perfect forms (yielding the “secondary imperfective converb”). This form is used especially with verbs that express a change of state, where the perfect expresses this state. For example, the perfect of *acuq’un* ‘sit down’ is *acuq’-nawa* and means ‘be sitting’. The secondary imperfective converb of this is *acuq’-nawa-ž*, ‘sitting’. An example is (11).

- (11) *K’wali-ž am galat-nawa-ž wa baxtlu ja-ž*
 house-DAT she:ABS [become.tired-PERF-IMC and happy be-IMC]
xkwe-da-j.
 return-FUT-PAST
 ‘She would come home tired (lit. having become tired) and happy.’
 (DD85,5:5)

2.1.3. Further connections

The imperfective converb is also used in purpose clauses (cf. example [12]) and in certain complement clauses (especially complements to “want”, “can”, “make”, “begin”, cf. example [13]). In this respect, it behaves very much like the infinitive in European languages. Especially in purpose clauses, it does not express simultaneity at all, but nonrealized posteriority.

- (12) *Mad ereq’, čexir qāču-ž tükwendi-ž q^bša!*
 again [vodka wine buy-IMC] store-DAT go.back:IMPV
 ‘Go back to the store again to buy vodka and wine.’ (Q81:110)
- (13) a. *Šura bukuṃatdi-ž ča-kaj kafir-ar iji-ž*
 Soviet government-DAT [we-SBEL nonbeliever-PL make-IMC]
k’an-žawa.
 want-IMPF
 ‘The Soviet government wants to make us nonbelievers.’ (HG89:7)
- b. *Qurxulu xar qwa-ž bašlamiš-na.*
 [terrible hail fall-IMC] begin-AOR
 ‘A terrible hail began to fall.’ (M79:3)

That the imperfective converb also has this use becomes less surprising if we consider the likely etymological connections of its suffix *-ž*. This suffix is homophonous with the dative case suffix *-ž* (cf. *ža-ž* ‘to me’ in [7 a]). The dative case also expresses direction (cf. *k’wali-ž* ‘to the house, home’ in [11]), and it is well known that infinitives often arise from purposive forms that come from directional or benefactive expressions (cf. Haspelmath 1989 for some cross-linguistic observations). What is less clear is how the converbal function is related to this. Simultaneous converbs generally come from locative case forms of verbal nouns, not from directional/purposive forms. However, the dative

case also has a nondirectional use in temporal expressions such as *alataj jisn-x* 'last year', *30-martdi-x* 'on the 30th of March'.

In addition to the dative suffix *-x*, there is another suffix in Lezgian grammar that is clearly closely related: the suffix *-(di)x* that forms adjectival adverbs, e.g., *gürčeg-dix* 'beautifully' (from *gürčeg* 'beautiful'), *k'envi-x* 'strongly' (from *k'envi* 'strong'). Since a converb may be regarded as a verbal adverb, it is not at all surprising that verbal and adjectival adverbs turn out to be formally very similar.⁵ The adjectival adverb even has a use in which it is interchangeable with the converb: the equivalent of copredicative adjectives, for example:

- (14) *Pakama-x q'ud jac-ni sağ=salamat-dix xürüi-x*
 morning-DAT four bull-also healthy-ADV village-DAT
xta-na.
 return-AOR
 'In the morning all four bulls returned to the village unharmed.'
 (K88,9:5)

Instead of *sağ-salamatdix*, one could also say *sağ-salamat jax* here, using the converb of *ja* 'be'.

Thus, the overall picture of interconnections is as in (15).

- (15) Imperfective converb *-x*
 converbal use ——— adjectival adverb *-(di)x*
 Dative case *-x* ——— infinitival use

How exactly these connections came about must remain speculation, but the likeliest hypothesis is that both the converbal use and the adjectival adverb ultimately go back to the directional use of the dative case suffix. (Changes from directional to locative are not unheard of, e.g., Latin *ad* 'to' became French *à* 'to; at'; Ancient Greek *eis* 'to' became Modern Greek *s(e)* 'to; in, at'.)

2.2. The aorist converb

2.2.1. Main uses of the aorist converb

The aorist converb is mainly used when a series of several successive events is expressed in one sentence. In most cases, a translation by means of *and* is more appropriate than by means of *having* ...

- (16) a. *Ruś elqwe-na q'uluq^bdi kilig-na.*
 girl [turn-AOC] backward look-AOR
 'The girl turned around and looked back.' (S88:35)
 b. *Werč haraj aqat-na qeci^b kat-na.*
 hen [scream come.out-AOC] outside run-AOR
 'The hen gave a scream and ran outside.' (DD71,3:20)

- c. *Sabir taksi q'u-na tadi-ʒ k'wali-ʒ axqat-na.*
 Sabir [taxi take-AOR] quick-ADV house-DAT return-AOR
 'Sabir took a taxi and quickly returned home.' (§83:62)

However, in contrast to some other "converb-prominent" languages, Lezgian does not have long sequences of such anterior converbs. Even constructions with two successive converbs, expressing three successive events, as in (17), are not very common, even in the written language.

- (17) *Stuldi-laj xkadar-na tadi-ʒ Alidi-n pataw fe-na*
 [[chair-SREL jump-AOR] quick-ADV Ali-GEN to go-AOR]
Rahmana ada-n ǧil-ǧj q'en-erar qāču-na
 Rahman(ERG) he-GEN hand-INEL bridle-PL take-AOR
 'Rahman jumped from the chair, went up to Ali, and took the bridles out of his hand.' (J89:22)

The aorist converb is the normal Lezgian way of expressing sequences of events. The alternative, the use of the coordinating conjunction *wa* (borrowed ultimately from Arabic) as in (18), is often found in bookish style (especially in texts translated from Russian), but it does not occur in the colloquial language. (Sequences of three or more events are expressed as separate sentences.)

- (18) *Ruś elqwe-na wa q'uluq^bdi kilig-na.*
 girl turn-AOR and back look-AOR
 'The girl turned around and looked back.'

As a comparison of (16 a) and (18) shows, the aorist converb suffix *-na* is homophonous with the aorist tense suffix *-na*.⁶ However, the two can be formally distinguished in the negative form, which is formed by prefixing *tV-* in the case of the converb and by suffixing *-č* in the case of the finite form (cf. [19 b–c] for examples of negated aorist converbs). In many cases the syntactic environment makes it absolutely clear that we are dealing with the converb rather than the finite form; e.g., *Sabir* in (16 c) is in the absolutive case and hence could never be the subject of *taksi q'u-na* 'took the taxi', so this expression must be a converbal phrase with an omitted subject.

The aorist converb is sometimes also used in constructions where the main verb is not in the aorist tense. In such cases, the translation "having ..." may be appropriate.

- (19) a. *Alidi-ʒ balk'an ina tu-na mašind-a awa-ʒ*
 Ali-DAT [[horse here leave-AOR] [car-INESS be.in-IMC]
q^bfi-n bič xuš tuš-ir.
 go.back-MSD PT pleasant COP:NEG-PAST
 'Having left his horses here, Ali did not like going back by car at all.' (J89:32)

- b. *Wun tars čir t-awu-na sadra q'wanni školadi-χ*
 you:ABS [lesson learn(PER) NEG-do-AOC] once even school-DAT
qwe-da-č.
 come-FUT-NEG
 'Not even once will you come to school without having learned your lesson.' (A90:13)
- c. *Güldestedi kartuf-ar wiči-n-ni waxa-n ajal-ri-n*
 Güldeste(ERG) potato-PL [self-GEN-and sister-GEN child-PL-GEN
arada sa tafawatlual t-awu-na paj-da-j.
 between one difference NEG-do-AOC] divide-FUT-PAST
 'Güldeste distributed the potatoes without making a distinction between her own and her sister's children.' (Š83:5)

The aorist converb may be combined with a main verb in a nonindicative form in such a way that the scope of the nonindicative meaning extends over the converb form as well.

- (20) a. *K'ewi rag ja, fe-na sa masa-d axtarmiš-in.*
 hard rock COP [go-AOC] one other-SBST.SG seek-HORT
 'It's a hard rock, let's go and look for another one.' (DD77,1:11)
- b. *Maxsuda-χ qarağ-na čüldi-χ fi-χ k'an-χawa-j.*
 Maxsud-DAT [[get.up-AOC] field-DAT go-INF] want-IMPF-PAST
 'Maxsud wanted to get up and go to the field (lit. wanted, having gotten up, to go to the field).' (G63:175)

When the verb in the aorist converb form expresses a change of state, the aorist converb may express the simultaneous existence of this state rather than an anterior event, although this often amounts to the same thing.

- (21) a. *Qabustan=badi ajwandi-k acuq'-na, mani-jar luhu-da-j.*
 Qabustan.ba(ERG) [balcony-SBESS sit-AOC] sing-PL say-FUT-PAST
 'Qabustan-ba sang, sitting on his balcony.' (lit. 'having sat down')
 (H77:9)
- b. *Ali q'en-erar q'u-na balk'andi-n wilik kwa-χ*
 Ali [bridle-PL hold-AOC] [horse-GEN before be.under-IMC]
jax-diχ fe-na.
 pedestrian-ADV go-AOR
 'Ali walked on foot in front of the horse, holding the bridles.' (lit. 'having grasped them') (J89:21)

The aorist converb is also used to express manner, especially modifying verbs of motion that are not specified as to the manner of motion.

- (22) *Ajal q̇udğun-na q̇arağ-na.*
 child [jump-AOC] get.up-AOR
 'The child jumped up.' (lit. 'having jumped, got up')(TG66:191)

2.2.2. A special use of the aorist converb

A curious use of the aorist converb is in different-subject complements to the verb *k'an-* 'want'. If the subject of the complement clause is coreferential with the dative experiencer participant of "want", the imperfective converb is used (cf. [13 a] in 2.1.3). But if the complement clause has its own subject, the complement clause verb is in the aorist converb, for example:

- (23) *Ča-χ sada-χ-ni hič sa č'awu-χ-ni dāwe ša-na*
 we-DAT one-DAT-even [ever one time-DAT-even war be-AOC]
k'an-da-č.
 want-FUT-NEG
 'None of us wants there ever to be war.' (K85,7:4)

A special case of this rule is the subjectless use of *k'an-* which then means "must" ("one wants" equating to "it is necessary").

- (24) *Za stxadi-χ za-χ ga-ji k̇umekd-aj čuxsağul laha-na*
 [I.ERG brother-DAT [I-DAT give-AOP] help-INEL thanks say-AOC]
k'an-da.
 must-FUT
 'I have to thank my brother for the help he gave me.'

It is a mystery to me why the same-subject construction should be associated with the imperfective converb and the different-subject construction with the aorist converb.⁷

2.3. Two special uses of the imperfective and aorist converbs

2.3.1. Converbs in complements to perception verbs

Like converbs in several European languages, Lezgian converbs are used in situation complements to perception verbs, especially *akun* 'see' (factive complements, as in *see that* ..., are expressed differently). Since the complement situation is necessarily simultaneous with the seeing event, the imperfective converb is the normal case.

- (25) a. *Cükwera-χ čpi-n pataw sa žehil q̇we-χ aku-na.*
 Cükwer-DAT [selves-GEN to one youth come-IMC] see-AOR
 'Cükwer saw a young man coming toward them.'

- b. *Zapira-ŋ wič ičtin bald-a awa-ŋ aku-na.*
 Zapir-DAT [self such state-INESS be.in-IMC] see-AOR
 'Zapir saw himself in such a state.' (lit. 'being in such a state')
 (D77,1:12)

However, when the verb expresses a change of state, the complement situation may be the resulting state, and then the aorist converb (cf. example [26]) or the secondary imperfective converb of the perfect may be used (cf. example [27]).

- (26) *Kwe-ŋ am galat-na aku-na-ni hič sadra-ni?!*
 you-DAT [it:ABS get.tired-AOC] see-AOR-Q even once-also
 'Have you seen it become tired a single time?' (Š83:12)
- (27) *Za-ŋ qür takw-ar-a cukwal acuq'-nawa-ŋ aku-na.*
 I-DAT [hare rape-PL-INESS squatting sit-PERF-IMC] see-AOR
 'I saw a hare squatting among the rapes.' (M83:22)

2.3.2. Converbs in temporal expressions: "for"/"ago"

A peculiar converbal construction is used to express the temporal notions "(some time) ago" and "for (some time)", "since (some time) ago". In this construction, the event whose temporal location is indicated is expressed as the converbal clause, and the period of time is expressed as the predicate of the standard copula *ja* 'be'.

When the imperfective converb is used, the meaning is "for", "since ... ago".

- (28) a. *Wun ʒa-ŋ t-akwa-ŋ sa šumud jis ja.*
 [you:ABS I-DAT NEG-see-IMC] one how.many year COP
 'I haven't seen you for a couple of years.' (lit. 'With me not seeing you, it has been a couple of years') (H77:6)
- b. *Čna xipeq^aanwili-n sovkozd-a k'walax iji-ŋ*
 [we:ERG sheep.breeding-GEN sovkhos-INESS work do-IMC]
gʒaf waxt ja.
 much time COP
 'We have been working on a sheep-breeding state farm for quite some time.' (lit. 'It has been quite some time with us working on a sheep-breeding state farm') (Š83:98)

When the aorist converb is used, the meaning is "ago".

- (29) *Am fe-na wad warx ja*
 [she:ABS go-AOC] five month COP
 'She went five months ago.' (lit. 'With her having gone, it has been five months') (M79:6)

This construction reminds one of Romance constructions like Spanish *hace algún tiempo* 'some time ago', *desde hace algún tiempo* 'for some time (in the past)'.

3. Specialized converbs

Lezgian has eight specialized converbs which correspond to temporal, purposive and manner conjunctions in European languages. This section describes and illustrates each of them briefly.

Although the meanings of these converbs are quite specific, only one or two of them are synchronically transparent. All of them can be related to other verbal or nominal forms, but in most cases the precise etymological relations remain obscure.

3.1. The temporal converb *-la* ‘when’

The suffix *-la* is not attached immediately to the verb stem, but to one of the participles (cf. Table 3 above). The precise temporal relation between the subordinate situation and the main clause situation depends also on the tense-aspect of the converbal clause.

- (30) a. *Či televizord-aj GDRdi-kaj peredača-jar*
[we:GEN television-INEL GDR-SBEL program-PL
qalur-da-j-la, zun hamiša kilig-iž že-da.
show-FUT-PTCP-TEMP] I:ABS always look-INF be-FUT
‘When programs on the GDR are shown on our TV, I always watch.’ (K85,7:4)
- b. *Nurbaladi-waj wiči-n dide aku-r-la aqwaž-iž*
Nurbala-ADEL [self-GEN mother see-AOP-TEMP] [stop-INF]
ša-na-č.
can-AOR-NEG
‘Nurbala couldn’t stop when he saw his mother.’ (R66:4)
- c. *Wiri-bur wūr-er-aj šeber-ri-ž fi-ž ša-ji-la,*
[all-SBST.PL village-PL-INEL city-PL-DAT go-INF be-AOP-TEMP]
čun dağdi-n xürü-ž xkwe-da-ni?
we:ABS mountain-GEN village-DAT return-FUT-Q
‘At a time when everybody goes from the villages to the cities, are we supposed to return to the mountain village?’ (Š83:57)

As the examples show, temporal converb clauses may have their own subject (e. g., [30 c]), but they may also lack a surface subject and are then controlled by the main clause (30 b).

The only other place where a suffix *-la* occurs in Lezgian grammar is in causal adverbs like *kič’e-la* ‘out of fear’ (*kič’e* ‘afraid’), *giši-la* ‘from hunger’ (*gišin* ‘hungry’). But one could further speculate about a relationship with the Super localization suffix *-l* (e. g. *tar-ce-l* ‘on the tree’).

3.2. The posterior converb *-daldi*

The suffix *-daldi* is attached to the imperfective stem of a verb. It is clearly somehow related to the superdirective case suffix *-ldi* which also may have the meaning “until” (e.g., *i ʕawa-ldi* ‘until this time’). The element *-da* could be related to the future suffix *-da*.

The meaning of this converb is “before” or “until”, depending on aspectual properties of the main clause. When the main clause situation is stative/durative or negated, the meaning is “until”.

- (31) a. *Dide Annidi ġülü-ʒ fi-daldi muallimwil-e*
 mother Anni(ERG) [husband-DAT go-POSTR] teachership-INESS
k'walax-na.
 work-AOR
 ‘My mother Anni worked as a teacher until she got married.’
 (Ko90,2,7:4)
- b. *Wi q^bsanwal ʒa req'i-daldi rik'e-laj alud-da-č.*
 you:GEN goodness I:ERG [die-POSTR] heart-SREL take.off-FUT-NEG
 ‘I will not forget your goodness until I die.’ (X89:11)

When the main clause situation is punctual/completed, the meaning is “before”.

- (32) a. *Siw-äj gadr-aj cük'üdi-kaj čile-l awat-daldi*
 [mouth-INEL throw-AOP] spittle-SBEL [earth-SRESS fall-POSTR]
murk ʒe-da-j.
 ice become-FUT-PAST
 ‘Spittle thrown out of the mouth turned into ice before falling on the ground.’ (K90,12:2)
- b. *Mašbur Samarkanddi-ʒ agaq'-daldi aburu-ʒ req'-e*
 [well-known Samarkand-DAT reach-POSTR] they-DAT way-INESS
gʒaf ʒat'-ar aku-na.
 many thing-PL see-AOR
 ‘Before they reached well-known Samarkand, they saw a lot of things on the way.’ (K87,1:5)

The “before” meaning of this converb may be emphasized by the additional use of the postposition *wilik* ‘before’ (from *wil* ‘eye’, i.e., lit. ‘under the eye’). This is the only circumstance in which a postposition may be combined with a converb in Lezgian.

- (33) a. *Wun xkwe-daldi wilik-ni ʒun sa šumud-ra*
 [you:ABS return-POSTR before]-also I:ABS one several-times

- ata-j-di* *ja.*
 come-AOP-SBST COP
 'I also came several times before you returned.' (G63:138)
- b. *Zun, meq^ber* *ž'e-daldi* *wilik,* *xür-äj* *eqeč'-na,*
 I:ABS [wedding be-POSTR before] [village-INEL go.out-AOC]
šeherdi-ž *fe-na.*
 town-DAT go-AOR
 'Before the wedding took place, I left the village and went to town.' (S88:154)

3.3. The immediate anterior converbs *-waldi*, *-namaz(di)*, and *-žamaz*

Somewhat surprisingly, Lezgian has as many as three different converbs for expressing the temporal relation of immediate anteriority. None of these is particularly frequent.

The suffix *-waldi* is attached to the aorist participle form of the verb:

- (34) *A kasdi,* *ağadiq^baj* *laž* *ga-ji-waldi,* *sa* *tfeng*
 [that man(ERG) [from.below dawn give-AOP-IMMANT] one rifle
jağ-un *lažim* *ja.*
 hit-MSD] necessary COP
 'That man must fire the rifle as soon as dawn begins in the east.'
 (Š83:102)

The suffix *-namaz(di)* is attached to the aorist stem of the verb. This suffix appears to be related to the continuative perfect suffix *-nama* (e.g., *acuq'-nama* 'is still sitting'), but the meaning is not as expected.

- (35) *Xür-äj* *eqeč'-namaz,* *ada-l* *sa* *sik'* *halt-na.*
 [village-INEL go.out-IMMANT] he-SREL one fox meet-AOR
 'As soon as he had left the village, he met a fox.' (K90,12:2)

The suffix *-žamaz* is attached to the imperfective stem of the verb. It appears to be related to the continuative imperfective suffix *-žama* (e.g., *k'walax-žama* 'is still working'), but again the meaning does not support this etymology.

- (36) *Xalq'di,* *sabur* *qap.uni-laj* *alax-žamaz* *pis*
 people(ERG) [patience vessel-SREL run.over-IMMANT] bad
insan *q'u-na* *wiči-n* *aradaž* *gadar-da.*
 person [hold-AOC] self-GEN from.among throw-FUT
 'As soon as patience runs over the vessel (s edge), the people take the bad person and expel him/her from among them.' (R66:24)

3.4. The graduative converb *-(i)rdawaj*

This suffix is attached to the imperfective stem of a verb and expresses a gradual development in the subordinate clause that correlates with a development in the main clause. The form *-(i)rdawaj* looks like an adelative case form of a substantivized archaic participle in *-(i)r*. Since the elative cases also express the notion of path (besides their primary meaning, source), this etymology seems to make some sense (*ẓ̌e-r-da-waj* lit. ‘along (the path of) becoming’, i. e., ‘as ... gradually becomes’).

- (37) *Juḡ mič'i ẓ̌e-rdawaj Šahdaḡ-ni q'aq'an ẓ̌e-ḡwa-j xiz*
 [day dark become-GRAD] Šahdaḡ-also [high be-IMPF-PAST] like
akwa-ḡwa-j.
 see-IMPF-PAST
 ‘As it (lit. the day) was getting darker, Shahdagh mountain seemed to be getting higher.’ (Or: ‘The darker it was getting, the higher Shahdagh mountain seemed to be getting.’) (Š83:102)

3.5. The purpose/manner converb *-wal*

The suffix *-wal* is always attached to a participial form of the verb, like *-la* (section 3.1) and *-waldi* (section 3.3). When attached to a future participle (38), it may express purpose. It seems that such purpose clauses always have a different subject (for same-subject purpose clauses, other strategies are available, e. g., the imperfective converb, as in [12]).

- (38) *Ada q^bsan-diḡ k'walax-da-j-wal, wuna gerek*
 [he(ERG) good-ADV work-FUT-PTCP-PURP] you:ERG necessary
tir šart'-ar jaratmiš-a.
 COP:PTCP condition-PL create-IMPV
 ‘Create the necessary conditions in order for him to work well.’
 (G63:158)

Another function of the *-wal* converb is to express comparison (cf. example [39 a]) and conformity (cf. example [39 b]). In this sense there are no restrictions on the tense-aspect of the verb.

- (39) a. *Igrami buba wiči-n k'ani ruxwa-jri-ḡ muhman*
 [dear father self-GEN dear son-PL-DAT guest
ẓ̌e-da-j-wal ča-ḡ muhman xu-š aziz.
 become-FUT-PTCP-PURP] we-DAT guest be-IMPV dear
 ‘Be our guest, our dear, like a dear father comes as a guest to visit his beloved sons.’ (G63:143)

- b. *Za hada laba-j-wal kʰe-na.*
 I:ERG [he(ERG) say-AOP-PURP] write-AOR
 'I wrote as he said.' (G63:143)

The suffix *-wal* appears to be related to the abstract noun suffix *-wal* (e.g., *lacuwal* 'whiteness', from *lacu* 'white'), but again the semantic side of the connection is unclear (why should *kʰwalax-da-j-wal*, lit. 'workingness', come to mean 'in order to work'?).

3.6. The causal converb *-wilāj* 'because'

The suffix *-wilāj* is attached to any participial form of the verb (like the converbs in *-la*, *-walɖi*, and *-wal*), for example:

- (40) *Papa am kʰwali-χ hebe ičʰi ja-χ*
 wife(ERG) [he:ABS home-DAT [bag empty be-IMC]
xta-nwa-j-wilāj sual-ar ga-na.
 return-PERF-PTCP-CAUS] question-PL give-AOR
 'His wife asked questions because he came back home with an empty bag'

The suffix *-wilāj* is transparently related to the abstract noun suffix *-wal*, whose inelative case form is *-wilāj*. The inelative generally expresses cause, e.g., *šad* 'glad', *šadwal* 'joy', *šadwilāj* 'out of joy'. So *xtanwajwilāj* in (40) is literally something like 'out of returningness'.

4. Control in converbal constructions: Lack of syntactic restrictions

Converbs express a situation that is conceptually closely connected to another situation. Since two connected situations often share the protagonist, converbal constructions often lack a subject of their own, and their omitted subject position is controlled by a participant in the matrix clause, as for instance in (2a), repeated here.

- (2) a. *Am ajwandi-k gazet kʰel-iχ aqʷaχ-nawa.*
 he:ABS balcony-SBESS [newspaper read-IMC] stand-PERF
 'He is standing on the balcony, reading a newspaper.' (G54:179)

Such control relations may be grammaticalized to different extents in different languages. Many languages do not allow overt, noncontrolled subjects in non-

finite constructions at all (in Stassen's 1985 terminology, these are languages that allow only conditional deranking, but not absolute deranking). And many languages have syntactic restrictions on possible controllers (e. g., only the matrix subject or other prominent arguments may be controllers).

In Lezgian, such control relations are not strongly grammaticalized, if at all. It is true that contextual converbs often have omitted and controlled subjects, cf. examples (2–6), (16 a, c), (17), (19–22) above. But this common configuration has not been grammaticalized. While converbal constructions that have their own subject are not common, they are nevertheless fully grammatical, e. g., (9 c) and (16 b) repeated here.

- (9) c. *Abur q'wed-ni qün qün-e awa-ʒ küčed-aj*
 they two-also [shoulder shoulder-INNESS be.in-IMC] street-INEL
ağuz q^bfe-na.
 down go.back-AOR
 'They both went back down the street, shoulder on shoulder.'
 (N88:89)

- (16) b. *Werč haraj aqat-na qeciq^b kat-na.*
 hen [scream come.out-AOC] outside run-AOR
 'The hen gave a scream and ran outside.' (lit. 'The hen, a scream coming out, ran outside') (DD71,3:20)

It is certainly not a coincidence that in both these cases (as well as in the analogous cases [9 a] and [40]) the subject of the converbal clause is linked to the matrix subject by a possessive relation ("their shoulders", "the hen's scream"). The close connection between the converbal clause and its matrix clause makes a pragmatic connection between the participants of the two clauses practically necessary, but there does not have to be a grammatical relation between two arguments. Furthermore, there is at least one special use of the contextual converbs where no close connection between the participants of the two clauses obtains: the use in temporal expressions described in section 2.3.2. This construction would be impossible if there were any grammatical restrictions on the expression or control of the converb subject. Likewise, the different-subject complement use of the aorist converb (section 2.2.2) presupposes the possibility of a separate subject of the converb clause.

Another aspect of the lack of grammaticalization of argument omission and control is the possibility for nonsubject arguments to be omitted and controlled. Thus, in (9 b) and (10 a), repeated here, the adverbial argument of the local copula is omitted.

- (9) b. *Aġa deredi-n k'an-äj lacu kaf ala-ŋ wač'*
 low valley-GEN ground-INEL [white foam be.on-IMC] river
kat-ŋawa.
 run-IMPF
 'A river runs along the ground of the lower valley, with white foam on it.' (M83:73)
- (10) a. *Zun Bukar xaludi-n q'iliw ruŋa-ni gwa-ŋ ata-na*
 I:ABS Bukar uncle-GEN to [rifle-also be.at-IMC] come-AOR
 'I came to Bukar-khalu with a rifle, too.'

This omission is possible because the adverbial argument can be reconstructed from the context, being coreferential with the matrix subject ('white foam being on it', 'a rifle being *with me*').

While the controller of an omitted converb argument is generally the matrix subject, there is again no syntactic restriction to this effect. In (7 a), the omitted converb subject is controlled by a matrix direct object, and in (35), the omitted converb subject is controlled by an adative argument of the matrix verb.

In converbal clauses with specialized converbs, the connection between the two situations is not as close as with contextual converbs, and converbal clauses with no omitted arguments are common, e.g., (30 a, c), (33 a–b), (34), (36–40). However, again this is not grammaticalized as, for instance, in English. Consider (32 b), repeated here.

- (32) b. *Mašbur Samarkanddi-ŋ agaq'-daldi aburu-ŋ req'-e*
 [well-known Samarkand-DAT reach-POSTR] they-DAT way-INNESS
gʒaf ʒač'-ar aku-na.
 many thing-PL see-AOR
 'Before they reached well-known Samarkand, they saw a lot of things on the way.' (K87,1:5)

In such a sentence, English has a choice between a finite clause (as in the translation above) and a converbal clause: *Before reaching well-known Samarkand ...* The point is that in English the finite clause must have a subject (**Before reached ...*), and the converbal clause must lack it (**Before they reaching ...*). In Lezgian there is only the converbal construction, but the omission of the subject is entirely optional. It can be omitted and controlled as in (32 b), but it could also be expressed overtly, as in (32 b').

- (32) b'. *Čeb mašbur Samarkanddi-ŋ agaq'-daldi ...*
 [selves well-known Samarkand-DAT reach-POSTR]

Sentence (32 b') sounds a little redundant because *čeb* can easily be recovered from the context, but it is certainly not ungrammatical.

5. Converbs in grammaticalized constructions

This section considers three areas of Lezgian grammar where converbs have been involved in a process of grammaticalization: temporal-aspectual periphrases, subordination, and postpositions.

5.1. Originally periphrastic tense-aspects: Imperfective and perfect

The imperfective (e. g., *gu-ɣwa* ‘is giving’) and the perfect (e. g., *ga-nwa* ‘has given’) are the youngest synthetic verb forms of Lezgian. In Uslar (1896) they were still treated as what they originally were: periphrastic constructions involving a converb and the local copula *awa* ‘be in’. The original structures must have been as in (41).

- (41) a. Imperfective periphrasis
 **gu-ɣ awa* lit. ‘is, giving’
 → *gu-ɣwa* ‘is giving’
 b. Perfect periphrasis
 **ga-na awa* lit. ‘is, having given’
 → *ga-nwa* ‘has given’

The use of converbs in periphrastic aspectual constructions has parallels in many other languages, e. g., the Spanish progressive periphrasis *está dando* ‘is giving’ (using the *gerundio*) and the Russian dialectal resultative *syn vsta-vši* ‘the son has gotten up’ (using the past converb).

5.2. The subordinator *luhux/lahana* ‘saying’

Luhux is the imperfective converb and *lahana* is the aorist converb of *lubun* ‘say’. Both forms are used in several subordinating constructions where the original meaning ‘saying, having said’ has bleached and they function very much like subordinating conjunctions marking finite subordinate clauses. (This is one of the few types of finite subordinate clause).

Luhux/lahana is used to mark direct speech and complement clauses to verbs of utterance and of thinking, for example:

- (42) a. *Gadadi, – Zun k’wal-e amuq’-da!, – laba-na haraj-na.*
 boy(ERG) I:ABS house-INNESS stay-FUT say-AOC scream-AOR
 ‘The boy screamed: “I will stay at home!”’
 b. *Gadadi wič k’wal-e amuq’-da laba-na haraj-na.*
 boy(ERG) [self house-INNESS stay-FUT say-AOC] scream-AOR
 ‘The boy screamed that he would stay at home.’

- c. *Düşüş že-daldi za am iq'wan xurba šair ja*
 [meeting be-POSTR] I:ERG [he:ABS so big poet COP
laha-na fikir-nawa-č-ir.
 say-AOC] think-PERF-NEG-PAST
 'Until I met him I didn't think he was such a great poet.'
 (Du85,4:122)

It is also used to mark causal clauses, especially ones which express an internal subjective motivation.

- (43) *Za r'imil kči-xwa laba-na, kün za-kaj inžikli*
 [I:ERG little write-IMPF say-AOC] you:ABS I-SBEL angry
že-mir.
 become-PROHIB
 'Don't get angry at me because I write little.' (G63:151)

Finally, *luhuz/lahana* is used in purpose clauses. The verb of the purpose clause must be in the optative mood.

- (44) *Nik'i q'san beber gu-j luhu-x aburu anix*
 [field(ERG) good crop give-OPT say-IMC] they(ERG) thither
gzať q'uk č'ugu-na.
 much dung pull-AOR
 'They brought a lot of dung there so that the field would yield a good crop.'

The grammaticalization of a converbal form of "say" as a subordinating conjunction is well known from many other languages around the world, cf., e.g., Ebert (1991).

5.3. From converb to postposition

Above (section 2.1.2), we have already seen cases where converb forms of the copulas were best translated by prepositions (e.g., example [10] above). The way a converb is translated into other languages cannot, of course, be a criterion for its grammatical status within Lezgian. But there are some converb-derived postpositions that can be identified by Lezgian-internal criteria.

The most common converb-derived postposition is *galax* 'with'. This postposition usually takes an argument in the postessive case (cf. example [45]), but its argument may also be in the absolutive case (cf. example [46]).

- (45) *Kursant-ri-kaj gʒaf-buru ruš-ari-q^b galaz*
 cadet-PL-SBEL many-SBST.PL(ERG) girl-PL-POESS with
q'üler-ɣawa-j.
 dance-IMPF-PAST
 'Many of the cadets were dancing with girls.' (S88:156)
- (46) *K'wali-n poldi-n k'anik wiči-n šarag-ar galaz dide*
 house-GEN floor-GEN below self-GEN young-PL with mother
q'if jašamiš ʒe-ɣwa-j.
 mouse living be-IMPF-PAST
 'Below the floor of the house lived mother mouse with her young mice.' (lit. 'her young mice being with [her]') (A90:16)

Literally *rušariq^b galaz* in (45) means "being behind/with girls" (with the subject omitted and controlled), while *šaragar galaz* in (46) is literally "the young being behind/with her" (with the adverbial phrase omitted and controlled). That *galaz* (plus postessive) is now a postposition is clear because a *galaz* phrase can be the argument of a verb such as *raxun* 'talk', for example:

- (47) *Zun ada-q^b galaz raxa-na.*
 I:ABS she-POESS with talk-AOR
 'I talked to her.'

A converbal reading of (47), "I talked, being with her" does not give the right result.

Another converb-derived postposition is *kiligna* 'according to; in view of, because', originally the aorist converb of *kilign* 'look'. Since *kilign* takes a dative argument for the role of the thing looked at, *kiligna* also takes a dative argument.

- (48) a. *Aɣarluwili-ɣ kiligna ɣun fe-na-č.*
 illness-DAT because.of I:ABS go-AOR-NEG
 'Because of the illness I didn't go.' (G54:180)
- b. *Čpi-n metlebdı-ɣ kiligna sočinitel'nyj*
 selves-GEN meaning-DAT according.to coordinating
sojuz-ar pud ʒüre-jri-ɣ paj-iɣ ʒe-da.
 conjunction-PL three kind-PL-DAT divide-IMC can-FUT
 'Coordinating conjunctions may be divided into three types according to their meaning.' (G57:44)

Interestingly, the negative form of *kiligna*, *kilig tawuna* (lit. 'not having looked') is also used as a postposition with the concessive sense "in spite of" (cf. König 1991 on the relation between cause, concession and negation).

- (49) *Ixtin jeke mabrumwil-eri-ɣ-ni kilig tawuna xalq'di-laj*
 such big deprivation-PL-DAT-also in.spite of people-SREL
wiči-n xaqi čil, č'al, adet-ar xü-ɣ
 [self-GEN native soil language custom-PL preserve-IMC]
alaq'-na.
 manage-AOR
 'In spite of such big deprivations, the people managed to preserve
 its native soil, its language, its customs.' (Ko90,7,22:3)

Another converb that has probably become a postposition is *kwačix* 'except' (taking an absolutive argument), lit. 'not being under'. However, it is difficult to find good criteria (besides its semantic specificity) for the postposition status in this case.

It is hardly surprising to find that the distinction between verbal converb forms and postpositions is sometimes blurred in Lezgian. The grammaticalization from converbs to adpositions has been observed in other languages, and undecidable intermediate cases are found everywhere (cf. Kortmann-König 1992).

6. Conclusion

Lezgian, as a typical head-final language with rich suffixing morphology, makes extensive use of converbal constructions. It has both contextual converbs that correspond to converbs in European languages (the imperfective and the aorist converb) and specialized converbs that correspond to adverbial subordinating conjunctions in European languages.

In addition to their major uses, the contextual converbs also have some special uses in complement clauses, temporal expressions, etc. They participate in grammaticalized constructions leading to new tense-aspects, conjunctions and postpositions.

The origin of the converbs themselves is rarely synchronically transparent. Based on comparative evidence, the aorist converb seems to be a very old form. Even most of the specialized converbs with their more specific meanings are not easily etymologized.

A feature of Lezgian converbal constructions that is in striking contrast to European converbal constructions is the almost complete lack of grammaticalization of argument omission and control. There do not seem to be any grammatical restrictions, and omission and control is determined by pragmatic principles.

Abbreviations

ABS	Absolutive case	INF	Infinitive
ADEL	Adelative case	MSD	Masdar
ADV	adverb suffix	NEG	negation
AOC	Aorist converb	OPT	Optative
AOP	Aorist participle	PAST	Past tense
AOR	Aorist	PER	periphrasis form
CAUS	Causal converb	PERF	Perfect
DAT	Dative case	PL	Plural
COP	copula	POESS	Postessive case
ERG	Ergative case	POSTR	Posterior converb
FUT	Future	PROHIB	Prohibitive
GEN	Genitive case	PT	particle
GRAD	Graduative converb	PTCP	participle
HORT	Hortative	PURP	Purpose/Manner converb
IMC	Imperfective converb	Q	Question marker
IMMANT	Immediate-Anterior converb	SBEL	Subelative case
IMPF	imperfective aspect	SBESS	Subessive case
IMPV	Imperative	SBST	substantivizing suffix
INEL	Inelative	SG	Singular
INESS	inessive case	SREL	Superlative case
		TEMP	Temporal converb

The following special conventions are followed in morphemic glosses: (a) the glosses of subordinate (embedded) clauses are enclosed in square brackets; (b) a zero-marked absolutive case is not indicated in the gloss for reasons of economy.

Notes

1. Other characteristic features of Lezgian (not necessarily shared by the language families mentioned or by other Nakh-Daghestanian languages) are: a five-vowel system (lacking *a*, including *ɨ*), palatal and labial vowel harmony, more than 50 consonants (including ejective stops, uvular obstruents, labialized obstruents); consistent ergative/absolutive case-making; almost no agreement; almost no operations that change grammatical relations. See Uslar (1896) and Haspelmath (1993) for comprehensive treatments of Lezgian grammar.
2. For details on Lezgian verbal morphology, see Moor (1985).
3. Most of the examples were taken from original Lezgian written texts. See Haspelmath (1993) for an explanation of the abbreviations of the sources which are given after each example.
4. For details of the control relations in converbs, see section 4 below.

5. The element *-di-* that shows up in consonant-final adjectives like *gürteg* 'beautiful' is unaccounted for, but it must be related somehow either to the substantivizing suffix *-di* (cf. *gürteg-di* 'beautiful one') or to the nominal oblique stem suffix *-di* (cf. *ajvan-di-k* 'on the balcony', e.g., in [2a]).
6. According to Alekseev (1989), an anterior converb suffix **-na* can be reconstructed for Proto-Lezgian, i.e., the proto-language of the Lezgian language family (including Lezgian and several other languages such as Tabasaran, Tsakhur, and Archi). Alekseev speculates that the Lezgian finite aorist was originally derived from the anterior converb, but the formal difference was later lost.
7. Bernard Comrie suggests (personal communication) that the common feature might be "association" vs. "dissociation", pointing out that a possible parallel is the use, in some languages with switch-reference, of same-subject forms for temporally very close events with different subjects, and of different-subject forms for temporally distanced (from each other) events with the same subject.

References

- Alekseev, Mixail E.
 1989 "K rekonstrukcii obščelezjinskogo formanta *deepričastija* predšestvovanija (prošedšego vremeni) **-na*" [On the reconstruction of the Common Lezgian formant of the converb of precedence (past tense) **-na*], in: Temirova, R. X. (ed.) *Otglagol'nye obrazovanija v iberijsko-kavkazskix jazykax* [Deverbal formations in Ibero-Caucasian languages]. Čerkessk: Karačaevo-čerkeksskij naučno-issledovatel'skij institut istorii, filologii i ekonomiki, 123–129.
- Ebert, Karen H.
 1991 "Vom Verbum dicendi zur Konjunktion – ein Kapitel universaler Grammatikentwicklung", in: Walter Bisang–Peter Rinderknecht (eds.) *Von Europa bis Ozeanien – von der Antonymie zum Relativsatz. Gedenkschrift für Meinrad Scheller*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich.) Zürich: Universität Zürich, 77–95.
- Gadžiev, Magomed M.
 1954 *Sintaksis lezjinskogo jazyka. Čast' I. Prostoe predloženie* [Syntax of the Lezgian language. Part I. The simple sentence]. Maxačkala: Dagestanskij filial AN SSSR.
 1963 *Sintaksis lezjinskogo jazyka. Čast' II. Složnoe predloženie* [Syntax of the Lezgian language. Part II. The complex sentence]. Maxačkala: Dagestanskij filial AN SSSR.
- Haspelmath, Martin
 1989 "From purposive to infinite – a universal path of grammaticization", *Folia Linguistica Historica* 10 (1–2): 287–310.
 1993 *A grammar of Lezgian*. (Mouton Grammar Library 9.) Berlin–New York: Mouton de Gruyter.
- Johanson, Lars
 this volume "On Turkic converb clauses".
- König, Ekkehard
 1991 "Concessive relations as the dual of causal relations", in: Zaefferer, Dietmar (ed.), *Semantic universals and universal semantics*. Berlin: Foris, 190–209.

Kortmann, Bernd-Ekkehard König

1992 "Categorial reanalysis: The case of deverbal prepositions", *Linguistics* 30: 671–697.

Moor, Marianne

1985 *Studien zum lesgischen Verb*. Wiesbaden: Otto Harrassowitz.

Stassen, Leon

1985 *Comparison and universal grammar*. Oxford: Blackwell.

Uslar, Petr Karlovič

1896 *Ėtnografija Kavkaza*. Jazykoznanie. VI. Kjurinskij jazyk. Tiflis. [Ethnography of the Caucasus. Linguistics. VI. The Küre language].

Converbs in Evenki

Igor' V. Nedjalkov

1. Introduction¹

Evenki is spoken by about 20 000 people in Siberia, mainly in: (1) the northern part of the Krasnojarsk and Irkutsk regions (e.g., the villages of Tura, Chirinda, Ekonda, Nakanno and Erbogachon); (2) areas in the vicinity of Lake Baikal (e.g., the villages of Vanavara, Baikit, Poligus and also some villages in Buryatia); (3) the Far-Eastern part of Russia (villages in the Khabarovsk and Vladivostok regions). Evenki belongs to the Northern Tungusic group of Altaic languages, the closest cognate languages being Negidal, Solon and Even (Lamut). These four languages form the northern subgroup of Tungusic languages. There is also the southern subgroup comprising five languages. (Nanai or Gol'di, Oroch, Uilta or Orok, Udehe and Ul'cha). Manchu (with its dialect Sibo) is the only member of a separate subgroup of Tungus-Manchu languages. All Tungusic languages are threatened with extinction primarily because of the contacts with socially dominating languages, e.g., Russian and Yakut.

Tungusic languages possess the following characteristic features: they are nominative-accusative, have preferred, but nonrigid SOV word order, extremely rich, exclusively suffixing verb morphology, and predominantly participial and converbal syntax. Evenki has both contextual and specialized converbs. Section 2 of this paper describes the morphological make-up of the converbal forms. Section 3 deals with functional/semantic types of Evenki converbs and section 4 discusses the control properties of the Evenki converbal constructions paying special attention to uses of same-subject (SS) converbs in different-subject (DS) constructions. The final section describes negative converbal forms. In the remainder of the introduction, I will outline the main properties of Evenki verbal morphology.

Evenki has seven tense forms. Three of them express past situations (forms with the suffixes *-ča*, *-ŋki* and *-ra*; with verbs expressing states the latter suffix produces forms denoting present situations, cf. *eme-re-n* 'he came', but *sa-re-n* 'he knows'). Three tense forms express future situations (forms with the suffixes *-d'a*, *-d'ana* and *-d'alla*). There is also one form which diachronically derives from the combination of the imperfective aspect marker *-d'a* and the nonfuture tense marker *-ra* (*-d'ara*) and always expresses present situations.² The future

tense marker *-d'a* and the present tense marker *-d'ara* may combine within one verb form with the imperfective aspect marker *-d'a* thus producing the following morphemic chains: *-d'a-d'a* and *-d'a-d'ara*, compare

- (1) *Nuŋan aŋi-li girku-d'a-d'a-n.*
 he forest-PROL go-IMPF-FUT-3SG
 'He will go through the forest for some time.'

Besides the synthetic tense forms listed above, there are analytic tense forms which consist of the perfective participle with the suffix *-ča* and one of the tense forms of the auxiliary *bu-* 'be', as in:

- (2) *Tar beje kalan-me loko-čo bi-si-n*
 that man-NOM pot-ACC hang-PERF.PART be-PRES-3SG
 'That man has hung the pot.'

Vowel alternation in verbal suffixes is determined by vowel harmony (cf. *eme-če-n* 'he came' and *loko-čo-n* 'he hung').

There is a group of aspectual suffixes which, as a rule, are added directly to the verb stem, thus always preceding either tense or converbal suffixes. The main aspectual suffixes are the following: the imperfective *-d'a* opposed to the pure verb stem of the common aspect, the inchoative *-l*, the processive *-či/-t*, the distributive *-kta*, the stative *-ča*, the semelfactive *-sin/-sn/-s* and the marker of rapid action *-malča*. These aspectual markers combine rather freely both with the tense forms and the majority of converbs.³

Person-number subject agreement inflection both for finite (tensed) forms and for nonfinite (participial and converbal) forms is indicated by two sets of affixes, which are in complementary distribution. Let us present first the two systems of subject agreement used for finite forms. The first one characterizes finite tense forms with the suffixes *-ra* (nonfuture), *-d'ara* (present), *-d'a* (future) and *-d'alla* (immediate future). This set includes the following markers: *-m* (1SG), *-nni* (2SG), *-n* (3SG), *-v* (1PL), *-s* (2PL), *-∅* (3PL), as described in Table 1.

Table 1. Nonfuture tense forms of the verb *baka-* 'find'

Person	Singular	Plural
1	<i>baka-∅-m</i> 'I found recently'	<i>baka-ra-v</i> 'We found recently'
2	<i>baka-∅-nni</i> 'You-SG found recently'	<i>baka-ra-s</i> 'You-PL found recently'
3	<i>baka-ra-n</i> 'He/she found recently'	<i>baka-ra-∅</i> 'They found recently'

The zero morphemes in the verb forms *baka-Ø-m* and *baka-Ø-nni* show that the nonfuture tense suffix *-ra* is omitted in the first and the second persons of the singular, while the zero morpheme in the verb *baka-ra-Ø* marks the third person plural. The second set of agreement suffixes is used in the perfect tense forms with the suffix *-ča* (formed on the basis of the participial form), the past iterative with the suffix *-ŋki* and the future tense forms with the suffix *-d'ana*. This set consists of suffixes which are identical with the markers of personal possession of nouns, cf. the nominal and verbal forms in Table 2.

Table 2. Forms with suffixes of personal possession

Person (singular)				
1	<i>d'u-v</i>	'my house'	<i>baka-ča-v</i>	'I have found'
2	<i>d'u-s</i>	'your-SG house'	<i>baka-ča-s</i>	'you-SG have found'
3	<i>d'u-n</i>	'his/her house'	<i>baka-ča-n</i>	'he/she has found'
Person (plural)				
1	<i>d'u-vun</i>	'our house'	<i>baka-ča-vun</i>	'we have found'
2	<i>d'u-sun</i>	'your-PL house'	<i>baka-ča-sun</i>	'you-PL have found'
3	<i>d'u-tin</i>	'their house'	<i>baka-ča-tin</i>	'they have found'

As for the subject agreement markers of the nonfinite verb forms, these are also represented by two sets. One of them, which fully coincides with the set listed in Table 2, is used both with participles and with converbs in their different-subject use. Table 3 contains the paradigm of the verb *baka-* 'find' in the form of the contextual converb with the suffix *-raki* which expresses either anteriority or condition and is always used in different-subject constructions.

Table 3. Paradigm of the converbal form *baka-raki-*

<i>baka-raki-v</i>	'after/if I found' (DS)
<i>baka-raki-s</i>	'after/if you-SG found' (DS)
<i>baka-raki-n</i>	'after/if he/she found' (DS)
<i>baka-raki-vun</i>	'after/if we found' (DS)
<i>baka-raki-sun</i>	'after/if you-PL found' (DS)
<i>baka-rak-tin</i>	'after/if they found' (DS)

In Table 4 we see the paradigm of the same verb in the perfect participle form with the suffix *-ča* in the accusative case. The latter form may follow, for instance, verbs of sense perception.

The second set of subject agreement markers used with nonfinite forms (and never with finite forms) coincides with the markers of the so-called reflexive possession of the nouns, for example: *purta* 'knife' – *purta-vi* 'one's own-SG (my/

Table 4. Paradigm of the participial form *baka-ča*

<i>baka-ča-va-v</i>	'my past finding-ACC something' (- <i>va</i> = ACC)
<i>baka-ča-va-s</i>	'your-SG past finding-ACC'
<i>baka-ča-va-n</i>	'his/her past finding-ACC'
<i>baka-ča-va-vun</i>	'our past finding-ACC'
<i>baka-ča-va-sun</i>	'your-PL past finding-ACC'
<i>baka-ča-va-tin</i>	'their past finding-ACC'

your/his/her) knife' – *purta-var* 'one's own-PL (our/your-PL/their) knife'. These markers (-*vi*/*-var*) are used with nonfinite verb forms in same-subject constructions. The following examples with participial and converbal forms are cases in point:

- (3) *Tar asatkan baka-ča-vi ajav-re-n.*
 that girl-NOM find-PERF.PART-REFL.SG like-NONFUT-3SG
 'That girl likes what/that she (ss) had found.
- (4) *Tar asatkan purta-vi baka-čala-vi*
 that girl-NOM knife-REFL.SG find-ANTE.CONV-REFL.SG
suru-re-n.
 go.away-NONFUT-3SG
 'That girl left having found her knife.'

Participles, which by definition may be used attributively, may also be used predicatively, and in both cases they do not take any personal markers. In the context of a plural subject they take the nominal plural marker -*l*, as in the following example:

- (5) *Beje-l d'u-la-ver suru-če-l.*
 man-PL house-ALL-REFL.PL go.away-PERF.PART-PL
 'The men went to their houses.'

In (5) the ordinary finite form with the marker of third person plural (-*tin*) is also possible:

- (6) *Beje-l d'u-la-ver suru-če-tin.*
 man-PL house-ALL-REFL.PL go.away-PAST-3PL
 'The men went to their houses.'

2. Morphological types of Evenki converbs⁴

A converb is defined here as "a nonfinite verb form whose main function is to mark adverbial subordination" (Haspelmath, this volume). From this follows that a converb cannot be the only verb form in a sentence, and that it is semanti-

cally related to another verb form (either finite or another nonfinite form; cf. Nedjalkov–Nedjalkov 1987 a: 75). It should be added that prototypical converbs do not occur in the positions of the predicate of a simple sentence, of the attribute to a noun, of the complement in complement clauses, or in the position of the subject. In the abovementioned four positions the following verb forms occur prototypically: a finite form, a participle, an infinitive, and a gerund respectively.

An almost complete paradigm of Evenki converbal forms is presented in Table 5 (VS stands for varying-subject converbs which may be used both in subject-coreferential and in subject-noncoreferential constructions). Some rare forms registered only in one or two individual dialects have been omitted Table 5.

Table 5. Evenki converbal suffixes

		Semantic types				
		Anteriority	Simultaneity	Posteriority	Contextual	Specialized
Syntactic types	SS	- <i>ksa</i> - <i>kanim</i> / - <i>kaim</i>	- <i>d'ana</i>	—	- <i>mi</i> - <i>na</i> - <i>mnak</i> - <i>mnen</i>	—
	VS	- <i>chala</i> - <i>ktava</i>	- <i>ɲasi</i>	- <i>dala</i> - <i>knan</i>	—	- <i>da</i> - <i>vuna</i>
	DS	—	- <i>d'anma</i>	—	- <i>raki</i>	—

None of these converbal markers is ever used together with tense markers. They replace the latter whenever a verb form occurs in a converbal position. Same-subject converbs may only take the plural suffix *-l* and no other suffix of subject agreement:

- (7) *D'u-la-ver eme-mi-l d'ep-čö-tin.*
 house-ALL-REFL.PL come-CONV-PL eat-PAST-3PL
 'Having come home they ate.'

Varying-subject converbs may take either the markers *-vi/-var* of reflexive possession (in same-subject constructions) or markers of personal possession listed in Table 3 (in different-subject constructions):

- (8) a. *Turu-du bi-ɲesi-vi tara-ve sa-čä-v.*
 Tura-LOC be-CONV-REFL.SG that-ACC know-PAST-1SG
 'I knew that when I was/lived in Tura.'

- b. *Turu-du bi-ŋesi-n tara-ve sa-ča-u.*
 Tura-LOC be-CONV-3SG that-ACC know-PAST-1SG
 'I knew that when he/she was/lived in Tura.'

Different-subject converbs obligatorily take markers of personal possession (cf. the verb forms presented in Table 3), whereas same-subject converbs never take these markers. As the lists of subject agreement markers show, there is no possibility of confusion between suffixes of reflexive possession used with varying-subject converbs in their same-subject use and suffixes of personal possession used with varying- and different-subject converbs in their different-subject use.

Some of these converbal suffixes also exist in other Tungusic languages, e.g., *-mi* (Manchu *-me*), *-raki*, *-da*, *-dala* and *-ŋasi*. Others seem to be used only in Evenki, e.g., *-ktava* and *-d'anma*. Special attention should be drawn to the morphologically complex suffix *-raki*. This suffix seems to consist diachronically of the nonfuture tense marker *-ra* and the common Tungusic suffix *-ki* expressing condition (in this pure form it may only be used in Uilta and – in the form *-tsi* – in Manchu). This is supported by the structure of two Evenki converbal forms which were recorded at the beginning of this century but have since gone out of use completely (that is why they are not included in Table 5). These are *-čaki* and *-d'aki*, which seem to consist of either the past tense marker *-ča* or the future tense marker *-d'a* plus the conditional suffix *-ki*. The forms with these suffixes were used only in different-subject constructions and expressed either anteriority or conditionality, just like the forms with the suffix *-raki*. Some decades ago they were replaced by the forms with the marker *-raki*.

3. Functional/semantic types of Evenki converbs

As is seen in Table 5, there are the following semantic types of converbs in Evenki: (1) converbs expressing anteriority (the suffixes *-ksa*, *-kanim/-kaim*, *-čala* and *-ktava*); (2) converbs expressing simultaneity (the suffixes *-d'ana*, *-ŋasi* and *-d'anma*); (3) converbs expressing posteriority (the suffixes *-dala* and *-kenan*); (4) contextual converbs (the suffixes *-mi*, *-na*, *-mnak*, *-mnen/-mmen* and *-raki*); and (5) specialized converbs which include forms expressing purpose (suffixes *-da* and *-vuna*). Each of the five groups will be discussed in turn below.

3.1. Converbs of anteriority

Anteriority may be expressed by the converbal forms derived with the suffixes *-ksa*, *-kanim/-kaim*, *-čala*, *-ktava* (specialized forms), *-na*, *-mi* and *-raki* (contextual converbs). The latter three forms will be dealt with in section 3.4. As for the former four forms, they differ from each other in a number of respects.

3.1.1. Converbs in *-ksa* and *-ka(n)im*

The two most frequently used converbs of anteriority are the forms in *-ksa* and *-kanim/-kaim*. These differ, however, in their dialectal distribution: in more than 30 eastern dialects spoken in the Khabarovsk and Vladivostok regions and on the island of Sakhalin, converbs in *-ksa* are very frequent⁵ and converbs in *-kanim/-kaim* are lacking, whereas in the northern dialects spoken in the northern part of the Krasnojarsk and Irkutsk regions and also in the majority of southern dialects spoken on the banks of the River Podkamennaya Tunguska (villages of Vanavara, Poligus, Baikit) converbs in *-kanim/-kaim* are used and forms in *-ksa* are practically nonexistent. Both converbal forms in question are perfective, as the following examples show. The first of them, (9 a), is taken from Sakhalin Evenki and the second (9 b), from the Ilimpiyskiy (northern) dialect.

- (9) a. *Dulin buga Kederenind'en sona-li-vi*
 middle world-NOM Kedereninden hole-PROL-REFL.SG
kildinča-ksa dunne-li girku-d'a-ksa Garpani-tkei
 jump.out-CONV land-PROL go-IMPF-CONV Garpani-DIR
iče-t-čere-n.
 see-PROC-PRES-3SG
 'Kedereninden of the Middle World (i. e., of the world of the living people) having jumped out through the hole and having walked across the land is (now) looking at Garpani.'
- b. *Ahi-va ga-kaim oron-mo tege-keim tar beje*
 wife-ACC take-CONV reindeer-ACC sit-CONV that man
buru-re-n.
 go.away-NONFUT-3SG
 'Having taken a wife and having sat on a reindeer that man left.'

When used after the main clause converbs in *-ksa* and *-kanim/-kaim* may denote posterior situations. The exact temporal interpretation with these forms can be a matter of utterance meaning, compare:

- (10) *Hegdi mo buru-re-n d'u-va tire-kse.*
 big tree-NOM fall-NONFUT-3SG house-ACC press-CONV
 'The big tree fell down crushing the house.'
- (11) *Bi buru-Ø-m mu-ve unku-keim.*
 I fall-NONFUT-1SG water-ACC spill-CONV
 'I fell down spilling the water'.

This use of converbs of anteriority fully corresponds to the analogous use of Russian converbs of anteriority in *-v/-vši*, cf. the Russian translations of examples (10) and (11):

- (10') *Bol'soe derevo upa-l-o, pridavi-v dom*
 big tree fall-PAST-3SG.NEUTR press-CONV house
 'The big tree fell down crushing the house.'

- (11') *Ja upa-l ras-pleska-v vod-u*
 I fall-PAST PREF-spill-CONV water-ACC
 'I fell down spilling the water.'

Forms in *-ksa* and *-kanim/-kaim* may denote actions the result of which is relevant at the time of the main action. In such cases there is a complex meaning consisting of the following components: anterior action as a necessary condition for simultaneous result, or specification of manner, compare:

- (12) *Bejetken ilit-ča-ča-n nAle-l-vi ugiri-kse.*
 boy-NOM stand-IMPF-PAST-3SG hand-PL-REFL.SG raise-CONV
 'The boy was standing there having raised his arms.' (i. e., 'The boy was standing there with raised arms')

As a rule, converbs in *-ksa* and *-kanim/-kaim* do not allow the imperfective aspect marker *-d'a*, the only exception being verbs of state and activity, which permit a combination of the converbal form with this aspectual marker, as in (9 a).

3.1.2. Converb in *-čala*

The suffix *-čala* consists diachronically of the participial suffix *-ča* (see Table 4) and the allative case marker *-la* (see examples [4] and [13]). Forms with the suffix *-čala*, used rather frequently in the function of anteriority, may be considered "true" converbal forms since the marker itself is not perceived by informants as morphologically complex, i. e., no "allative" semantics is present anymore in the corresponding converbal forms (cf. example [4]), and the forms in *-čala* fully correspond to the definition of a converb. Converb forms with the marker *-čala* also exist in Even, Solon and Negidal, thus being of common Northern Tungusic origin. The converb in *-čala* is usually used in different-subject constructions (like many other participle-based converbs in Altaic languages).⁶ The converb in *-čala* has the following peculiar properties: (1) it is always accompanied by a past tense finite form (just as the converb of simultaneity *-nasi* analyzed in section 3.2.2); (2) it never takes the imperfective aspect marker *-d'a*, thus always denoting punctual states of affairs; (3) it always stands before the finite form.

- (13) *Si suru-čele-s ninakin-mi n'an*
 you go.away-CONV-2SG dog-1SG.POSS again
gogo-l-lo-n.
 bark-INCH-NONFUT-3SG
 'After you had left, my dog began to bark again.'

Converbs in *-čala* with the verbs *bi-* 'be' and *ilten-* 'pass by' denote the lapse of time, after which a certain situation occurred. The initial reference point may not be expressed (cf. example [15]):

- (14) *Ilalla-va bi-čele-tin eme-re-n.*
 three.days-ACC be-CONV-3PL.POSS come-NONFUT-3SG
 'He came after they had stayed there for three days.'
- (15) *d'an minuta-l ilten-čele-tin umun beyumimni i-re-n.*
 ten minute-PL pass-CONV-3PL one hunter enter-NONFUT-3SG
 'In ten minutes a hunter entered.'

The converbs of anteriority analyzed above may cooccur in one sentence, compare

- (16) *Kuŋaka-r amut-tula suru-sin-čele-ver asa-l-ve*
 child-PL lake-ALL go.away-SEMELF-CONV-REFL.PL woman-PL-ACC
iče-kse-l d'u-l-dula-ver tuxsa-ra-Ø;
 see-CONV-PL house-PL-ALL-REFL.PL run-NONFUT-3PL
 'The children went to the lake, saw the women and ran to their houses.'

3.1.3. Converb in *-ktava*

The last converb expressing immediate anteriority, the form derived by means of the suffix *-ktava*, is almost never used nowadays. Diachronically it is the accusative case form of the deverbal noun formed with the distributive suffix *-kta* (cf. the converb of simultaneity in *-d'a-n-ma* which diachronically also consists of a verbal noun with the suffix *-n* added to the imperfective verb stem in *-d'a* plus the accusative case marker *-ma* used after stem final *-n*).

- (17) *Dolbo Amarcha asini-ktava-n amin-in d'u-la-n*
 night Amarcha fall.asleep-CONV-3SG father-3SG house-ALL-3SG
i-re-n.
 enter-NONFUT-3SG
 'In the evening when Amarcha fell asleep, (immediately after that) his father entered his house.'

3.2. Converbs of simultaneity

Simultaneity may be expressed by the converbal forms derived by means of the suffixes *-d'ana*, *-ŋasi* or *-d'anma*.

3.2.1. *Converb in -d'ana*

Of the three forms mentioned, the most frequent and usual form is the converb with the suffix *-d'ana*. This form is almost always used in same-subject constructions (for exceptions see section 4) and, as a rule, precedes the finite form. With verbs of activity and accomplishment it expresses durative simultaneous situations. With verbs denoting punctual situations it expresses iterative simultaneous situations.

- (18) a. *Bejumimni-l bira-li d'avra-d'ana-l moti-va iče-če-tin.*
 hunter-PL river-PROL boat-CONV-PL elk-ACC see-PAST-3PL
 'Boating along the river, the hunters saw the elk.'
- b. *Tar asi bi-d'e-če-n sulaki-l-ve va-d'ana.*
 that woman live-IMPF-PAST-3SG fox-PL-ACC kill-CONV
 'That woman lived killing foxes.' (or 'That woman earned a living by killing foxes.')

In the latter example either a simultaneous or an instrumental reading is possible. It is only rarely that the converb in *-d'ana* may be interpreted as expressing the function of condition. The future tense of the finite form seems to be the relevant factor of conditional interpretation, as in:

- (19) *Asin-d'ene dolbo-n dulin-in, tege-d'ene une si*
 fall.asleep-CONV night-3SG middle-3SG sit-CONV early you
e-te-nni ajat a-re.
 no-FUT-2SG good sleep-NEG.PART
 'If you go to bed in the middle of the night and get up early, you won't have a good sleep.' (lit. 'Falling asleep in the middle of the night (and) getting up early, you will not have a good sleep')

3.2.2. *Converb in -nasi*

The next converb expressing simultaneity is the form with the suffix *-nasi*. It is used both in same- and different-subject constructions and it takes either the reflexive possessive or the personal possessive markers. Such converbs are always accompanied by the finite form in one of the past tenses and, as a rule, they occur before the finite form and quite freely take the imperfective aspect marker *-d'a*.

- (20) a. *Er ure-li gene-d'e-nesi-vi kete-ve bejge-l-ve*
 this hill-PROL go-IMPF-CONV-REFL.SG many-ACC animal-PL-ACC
iče-ηki-u.
 see-IT.PAST-1SG
 'When I went across this hill, I saw many animals.'

- b. *Bira donoto-d'o-ŋosi-n bu homoti-va akin-nun-mer*
 river freeze-IMPF-CONV-3SG we bear-ACC brother-COM-REFL.PL
va-ča-vun.
 kill-PAST-1PL
 'When the river was freezing, we together with our brother killed
 a/the bear.'

Converbs in *-ŋasi* usually denote remote past situations which continued for a long period of time. The verbs *bi-* 'be', 'live' and *in-* 'live' are often found in the converbal form with this marker, for example:

- (21) a. *Tar asi in-d'e-ŋesi-ji tara-ve ulgučen-e-n.*
 that woman live-IMPF-CONV-REFL.SG that-ACC retell-NONFUT-3SG
 'That woman retold that when she was alive.'
- b. *Mosa-du bi-ŋesi-vun hute-vun bu-de-n.*
 forest-DAT.LOC be-CONV-1PL child-1PL die-NONFUT-3SG
 'When we were/lived in the forest our child died.'

3.2.3. Converb in *-d'anma*

The last converb expressing simultaneity – the form in *-d'anma* – has almost completely gone out of use. It is always used only in different-subject constructions, which is why the only agreement suffixes it may take are those of personal possession and never of reflexive possession. Diachronically, as was mentioned above, it consists of the imperfective aspect marker *-d'a*, the nominalizing suffix *-n* and the accusative case suffix *-ma* (this allomorph is used after the stem-final *-n*). Forms without the marker *-d'a* are found in speech very rarely.

- (22) a. *Bi taŋ-d'anma-v ekin-mi sune uli-d'eye-n.*
 I read-CONV-1SG sister-1SG you.PL.ACC feed-FUT-3SG
 'While I read my sister will give you food.'
- b. *Oro-r-vor oni-nma-vun asatka-r*
 deer-PL-REFL.POSS.PL look.for-CONV-1PL girl-PL
tevli-d'e-ča-tin.
 gather.berries-IMPF-PAST-3PL
 'While we were looking for our reindeer, the girls gathered berries.'

In (22b) the converbal form with the imperfective aspect marker *-d'a* (*oni-d'anma-vun* 'while we were looking for') would be more appropriate. Converbs in *-d'anma* express the meaning of limited simultaneity, i. e., that the period of temporal coincidence of two situations is rather short.

- (23) *Bi edu teget-čenme-v si mule-keł.*
 I here sit-CONV-1SG you-SG bring.water-IMP.2SG
 'You go and bring water while I am sitting here.'

- (24) *Si taŋ-d'anma-s nuŋan dukuvun-ma duku-ča-n.*
 you read-CONV-2SG he letter-ACC write-PAST-3SG
 'While you were reading/read he wrote a letter.'

3.3. Converbs of posteriority

Posteriority may be expressed by the converbal forms derived by means of the suffixes *-knan* and *-dala* (the former form in contrast to the latter has considerably more clearly felt resultative coloring).

3.3.1. Converb in *-knan*

The converb formed with the suffix *-knan* expresses the result which comes as a consequence of a prior action expressed by the finite form. The converb of result in *-knan* almost always follows the finite form and never takes the imperfective marker *-d'a*. Usually it may be replaced by the posterior converb in *-dala* since the latter in its second meaning also expresses a certain result achieved as a consequence of a prior action, expressed by the finite verb, compare:

- (25) a. *Bi tuksa-ča-v deru-knen-mi/deru-dele-vi.*
 I run-PAST-1SG get.tired-CONV-REFL.SG
 'I ran until I got tired.'
- b. *Tuksu-l ŋene-d'ere-Ø so baktira o-knan-in.*
 cloud-PL go-PRES-3PL very dark become-CONV-3SG
 'Clouds are coming, so that it will get very dark.'
- c. *Bi pektirevun-duki-v sot d'avuča-d'a-ča-v umukeče-r-vi*
 I gun-ABL-1SG very hold-IMPF-PAST-1SG finger-PL-REFL.SG
bagdarga-knan-tin/ bagdarga-dala-tin.
 become.white-CONV-3PL become.white-CONV-3PL
 'I held my gun so tight that my fingers became white.'

3.3.2. Converb in *-dala*

The second converbal form expressing posterior situations is derived by means of the suffix *-dala* and denotes posterior situations (1) until/before which other situations, expressed by the finite forms, continue or take place, or (2) which come as a result of anterior situations, expressed by the finite forms.

- (26) a. *Bejetken čas kaltaka-ja-n alat-ča-ča-n upkat*
 boy hour half-ACC-3SG wait-IMPF-PAST-3SG all
eme-dele-tin.
 come-CONV-3PL
 'The boy had been waiting for half an hour until everybody came.'

- b. *Bu suru-re-v purta-vi sokor-dolo-s*
 we leave-NONFUT-1PL knife-REFL.SG lose-CONV-2SG
 'We went away before you had lost your knife.'
- c. *Er ure-ve tukti-d'ene-s ojo-vo-n is-tala.*
 this mountain-ACC climb-FUT-2SG peak-ACC-3SG reach-CONV
 'You will climb this mountain until you reach its peak.'

The suffix *-dala* may also combine with nouns, as in: *luṅur* 'evening' – *luṅur-dele* 'until the evening', 'before evening comes/came', *timatne* 'tomorrow' – *timatne-dele* 'before/until tomorrow'.

3.4. Contextual converbs

The group of contextual converbs includes converbs in *-na*, *-mnen/-mmen*, *-mnak* and also two temporal-conditional converbs – the same-subject converb in *-mi*, which exists in all Tungusic languages, and the different-subject converb in *-raki*, also found in Even, Solon, Negidal, Uilta and Oroch.

3.4.1. Converb in *-na*

The contextual converb, formed by means of the suffix *-na*, with nonstative verbs denotes prior actions which are felt to be temporarily very close to the time of the main action, i.e., the action expressed by the finite verb. This form is rarely used without the imperfective aspect marker *-d'a* and in this case it expresses immediate anteriority. The form with the imperfective marker *-d'a*, *-d'ana*, always expressing simultaneity, is dealt with in the section 3.2.1.

- (27) *Timani-tekin erde tege-ne bejunkte-vki bi-če-n.*
 morning-every early get.up-CONV hunt-HAB.PART be-PAST-3SG
 'Getting up early every morning he usually immediately went hunting'.

With verbs of state and some verbs of activity (e.g., *ičet* 'look at', *bejit* 'crawl to [an animal in order to kill it]', *bi* 'be', *tuksa* 'run') converbs in *-na* denote simultaneous situations, as in:

- (28) *Bira-kan-me solo-d'o-m ertiki-tartiki ičet-ne.*
 river-DIMIN-ACC boat-PRES-1SG here-there look-CONV
 'I am going by boat down the river looking here and there.'
- (29) a. *Bu ilan bi-ne-l suru-sin-e-v.*
 we three be-CONV-PL go.away-SEMELF-NONFUT-1PL
 'We were three when we left.'

- b. *Nuŋan alagumni bi-ne ajat haval-d'a-ča-n.*
 he teacher-NOM be-CONV good work-IMPV-PAST-3SG
 'He worked well as a teacher.'

The converb in *-na* is sometimes used in a fully reduplicated form (cf. Haspelmath's account of Lezgian reduplicated converbal forms in this volume).

- (30) *Bu pektirevu-r-ve ga-na ga-na suru-če-vun.*
 we gun-PL-ACC take-CONV take-CONV go.away-PAST-1PL
 'We left having taken our guns.'

The interpretation of either anteriority or simultaneity of situations expressed by converbs in *-na* does not correlate with their position before or after the finite verb.

3.4.2. Converb in *-mnen/-mmen*

As a rule, the forms with the suffix *-mnen/-mmen* follow the finite verb and express immediate posteriority. Occasionally, they are used before the finite verb and then denote either simultaneity or immediate anteriority. With this temporal vagueness forms in *-mnen/-mmen* thus resemble converbs with the suffix *-mnak*.

- (31) a. *Aka homoti-va va-ča-n mučū-mnen.*
 brother bear-ACC kill-PAST-3SG return-CONV
 'My brother killed the bear and (immediately) returned.'
- b. *Girki-v tikuli-ksa tetige-vi teti-mnen*
 friend-1SG get.angry-CONV clothes-REFL.SG put.on-CONV
d'u-duk-vi ju-re-n.
 house-ABL-REFL.SG come.out-NONFUT-3SG
 'My friend got angry (and quickly) putting on his clothes he went out of his house.'
- c. *Asi ŋale-vi kalan-dula di-d'e-vkei*
 woman hand-REFL.SG pot-ALL insert-IMPV-HAB.PART
tadu urku-mnen.
 there mix-CONV
 'The woman now and then inserts her hand into the pot, thereby mixing (the contents) there.'

In case of immediate anteriority forms in *-mnen* compete with the forms in *-mnak* (see next section), compare:

- (32) *Tar beje oron ije-l-duki-n d'ava-mnen/d'ava-mnak*
 that man deer horn-PL-ABL-3SG take-CONV
elge-re-n.
 bring-NONFUT-3SG
 'That man taking the reindeer by its horns brought it home.'

3.4.3. Converb in *-mnak*

The converbal form with the suffix *-mnak* is used only in same-subject constructions, but in comparison with the converb in *-d'ana* it possesses the following characteristics: (1) beside the function of simultaneity, forms in *-mnak* may also express immediate anteriority and immediate posteriority; (2) converbs in *-mnak* almost always express punctual situations and very seldom may take the imperfective aspect marker *-d'a*; (3) converbs in *-mnak* in texts usually follow the finite verb form:

- (33) a. *Kunaka-r evi-mneki-l mo-l-va tav-ra-Ø.*
 child-PL play-CONV-PL firewood-PL-ACC gather-NONFUT-3PL
 'The children gathered firewood while playing.'
- b. *Timatne tege-mnek eme-kellu.*
 tomorrow sit-CONV come-IMP2PL
 'Come tomorrow immediately after you get up.'
- c. *Bu eme-re-v togo-vo ila-li-mnak.*
 we come-NONFUT-1PL fire-ACC burn-INCH-CONV
 'We came and immediately began to burn the fire.'

Although the form in *-mnak* may express simultaneity, in many cases there is vagueness, i.e., either a simultaneous or an immediate anterior interpretation is possible, cf.

- (34) a. *Bi ud'akit-va d'ute-mnek bira-va iče-Ø-m.*
 I path-ACC cross-CONV river-ACC see-NONFUT-1SG
 'Crossing/having crossed the path I saw the river.'
- b. *Guleseg-ve ilte-mnek asi časki suru-re-n.*
 village-ACC pass-CONV woman further go-NONFUT-3SG
 'Passing/having passed the village, the woman went further.'

3.4.4. Temporal-conditional converbs in *-mi* and *-raki*

These forms may express either the temporal functions (simultaneity – with the imperfective aspect marker *-d'a* – or anteriority – without *-d'a*; cf. examples [35 d] and [35 e]) or the meanings of condition, cause, or – with the enclitic *-da* 'also', 'even' – concession. The subjunctive and the imperative mood forms, as well as the future tense forms of the finite verb lead to the conditional reading of these converbs, whereas all the past tense forms force a temporal interpretation of these converbs. Sometimes both readings are possible (cf. example [35 a]). The converb in *-mi* may take only the plural marker *-l*, whereas the converb in *-raki* always takes a marker of personal possession. Below we give some examples of both temporal and nontemporal uses of contextual converbs.

(35) Temporal use:

- a. *D'u-la-vi muču-mi bejunkte-ne-d'e-m.*
house-ALL-REFL.SG return-CONV hunt-GO-FUT-1SG
'When/if I return home, I will go hunting.'
- b. *Sama-sel eme-mi asi-va-n iče-re-Ø.*
shaman-PL come-CONV woman-ACC-3SG see-NONFUT-3PL
'Having come, the shamans saw his wife.'
- c. *Agi-li ŋene-d'e-mi denk'e-l-ve va-vki.*
forest-PROL go-IMPF-CONV sable-PL-ACC kill-HAB.PART
'Going through the forest he hunts sable.'
- d. *Eme-reki-n bokto-du-tin nadan beje-l bukle-d'ere-Ø.*
come-CONV-3SG road-DAT.LOC-3PL seven man-PL lie-PRS-3PL
'When he/she came, (he/she saw) seven men were lying on their road.'
- e. *Eme-d'e-reki-n nadan beje-l bukle-d'ere-Ø.*
come-IMPF-CONV-3SG seven man-PL lie-PRS-3PL
'When he/she was coming (he/she saw) seven men were lying there.'

(36) Nontemporal use:

- a. *Asatkan-me ajav-mi asila-mća-v.*
girl-ACC love-CONV marry-SBJV-1SG
'If I loved this girl I would marry her.' (condition)
- b. *Bejetke-r evi-mi ike-mi bejunkte-d'e-če-tin.*
boy-PL play-CONV sing-CONV hunt-IMPF-PAST-3PL
'The boys were hunting, playing and singing at the same time.' (concomitant circumstance)
- c. *Egesi bi-mi ŋorča-maći-mu-d'a-ča-n.*
strong be-CONV fight-REC-VOL-IMPF-PAST-3SG
'He wanted to fight with somebody because he was strong.' (reason)
- d. *Si dolboltono mun-dule eme-reki-s bi girki-vi*
you evening we-ALL come-CONV-2SG I friend-REFL.POSS.SG
eri-d'eye-v.
call-FUT-1SG
'If you come to us in the evening, I will call my friend.' (condition)
- e. *Mata-l une-imerit suru-rek-tin bu kino-la*
guest-PL early-CMPAR leave-CONV-3PL we cinema-ALL
suru-če-vun.
leave-PAST-1PL
'As the guests left earlier, we went to the cinema.' (reason)

- f. *Sun-mi-da bi-reki-n bi upkačün ulap-ča-u.*
 coat-1SG-EVEN be-CONV-3SG I entire get.wet-PAST-1SG
 'Although I had my coat, I got soaked to the skin.' (lit. 'Although there was my coat, I got soaked entirely') (concession)

Analytic converbal forms consisting of one of the two participial forms (either the perfect participle in *-ča* or the future participle in *-d'ana*) and the converbal form of the auxiliary verb *bi-* generally have a conditional interpretation, for example:

- (37) *Si min-dule eme-če bi-mi kete-ve sa-mča-s.*
 you I-ALL come-PERF.PART be-CONV many-ACC know-SBJV-2SG
 'If you had come to me, you would have learned a lot.'

In their temporal use, contextual converbs compete with the specialized converbs expressing either anteriority or simultaneity. In such cases converbs in *-mi* and *-raki* may be replaced by the converbal forms in *-ksa*, *-čala* or *-čala* and *-nası*, respectively, without any considerable change in denotational meaning, compare:

- (38) a. *I-reki-n /I-čele-n etirken turet-čere-n.*
 enter-CONV-3SG /enter-CONV-3SG old.man say-PRS-3SG
 'When he/she entered, the old man (DS) said.'
 b. *Vojna bi-d'e-reki-n /bi-nesi-n nuğan kusil-če-n.*
 war be-IMPF-CONV-3SG /be-CONV-3SG he fight-PAST-3SG
 'When there was war he fought.'

Unlike other converbs described above, the contextual converb in *-mi* may function as the infinitive in complement clauses containing modal and phasal verbs (the same is partially true for the purposive converb with the suffix *-da*, described in the next section, which may be used in complement clauses after causative and, rarely, modal verbs):

- (39) *Bejetken alba-ra-n bira-va elbesče-mi.*
 boy can.not-NONFUT-3SG river-ACC swim-CONV
 'The boy could not swim across the river.'

The infinitival use of converbs in *-mi* and *-da* is characteristic of all the Tungusic languages.

3.5. Converbs of purpose

There are two nontemporal converbs which express purpose. These are derived by means of the suffixes *-da* and *-vuna*. Of the two purposive converbs the form in *-vuna* has almost gone out of use nowadays, whereas the form with the suffix

-da is very frequent. As a rule, forms in *-da* follow the finite verb and may take the imperfective marker *-d'a*. Forms in *-da* very often correspond to infinitives in European languages, compare:

- (40) a. *Bi nuṇan-dula-n tukesā-ča-v dukuvun-ma-s bu-de-vi.*
 I he-ALL-3SG run-PAST-1SG letter-ACC-2SG give-CONV-REFL.SG
 'I ran to him to give him your letter.'
- b. *D'ev-de-n iri-če-n.*
 eat-CONV-3SG cook-PAST-3SG
 'He/she prepared meals for him/her (DS) to eat.'
- c. *Evi-vune-v eviken-me emev-re-n.*
 play-CONV-1SG toy-ACC bring-NONFUT-3SG
 'She brought the toy for me to play.'

4. Control properties of Evenki converbs

The main control characteristics of the Evenki converbal forms are presented in Table 5 and are also described above. In this section I will give some data on the exceptional use of some same-subject converbs in different-subject constructions. This phenomenon is widely attested in the Altaic languages (cf. Bergelson and Kibrik, this volume). In Evenki this use is found, though very seldom, with the converbs in *-ksa*, *-mi* and *-d'ana*, but only in the following cases: (1) when there is a "part-whole" or possessive relationship between two subjects; (2) if the main clause describes a situation perceived by the main clause subject; (3) if the converb in *-mi* expresses condition and there is an overlap in the set of participants of the main and the converbal clauses; (4) if the converbs in *-mi* or *-ksa* express cause and there is an overlap of participants or a "part-whole" relation between them. Below I give some examples.

1. A "part-whole" or possessive relation holds between subjects:

- (41) a. *Eme-kse-l hunat amin-tik'i-vi gun-čo-n.*
 come-CONV-PL daughter father-REFL.SG say-PAST-3SG
 'After they had come, the daughter told her father.'
- b. *Bira-l ejen-d'ene-l muje-l-tin arba-d'ara-Ø.*
 river-PL flow-CONV-PL water-PL-3PL get.shallow-PRS-3PL
 'Rivers flow (and) their waters become shallow.'

2. The main clause describes a situation which is perceived by a human being as a result of his motion (the latter is described by a converb):

- (42) a. *I-kse ekun-kat ač̣in.*
 enter-CONV anybody-ENCL no
 'When he entered, there was nobody there.'
- b. *Tar ηene-kse-l, ηene-kse-l d'egde bi-d'ere-n.*
 that go-CONV-PL go-CONV-PL fire be-PRS-3SG
 'So they went and went (and saw) there was fire in the forest.'

3. The converb in *-mi* expresses condition and the participants overlap:

- (43) a. *Aja-t uj-mi oron e-te-n sukč̣a-ra.*
 good-INSTR tie-CONV deer no-FUT-3SG tear.away-NEG
 'If one ties a reindeer well, it will not run away.'
- b. *Bu d'e-mu-l-mi Chochan uli-d'eye-n.*
 we eat-VOL-INCH-CONV Chochan feed-FUT-3SG
 'If we are hungry, Chochan will feed us.'
- c. *Goro-jo inet-mi oro-r goroli-vki-l bi-č̣e-tin.*
 long-ACC live-CONV deer-PL run.afar-HAB.PART be-PAST-3PL
 'If one lives for a long time (in one place), reindeer usually run very far away.'

4. Converbs in *-mi* or *-ksa* express cause and there is an overlap of participants and/or a "part-whole" relation between them:

- (44) *Tar tikuli-ksa kornorin sekse-n koju-na-n.*
 that get.angry-CONV black blood-3SG become.tough
 'That man got angry, (and) his black blood became tough.'

It should be stressed that cases of a different-subject use of same-subject converbs are very rare.

5. Negative forms of converbs

Like other negative verb forms, negative forms, of converbs are formed by means of the auxiliary negative verb *e-* 'not' taking in this case one of the converbal suffixes plus a fixed form of the notional verb marked with the suffix *-ra*.⁷ The auxiliary verb *e-* can take only eight of the the total of fifteen converbal suffixes. Below we list the possible combinations of the negative converbal form (a hyphen in the negative converb means that one of the markers of personal or reflexive possession is obligatory in this position) plus the notional verb form *eme-re* (*eme-* 'come'):

Anteriority:	<i>e-ne eme-re</i> 'not having come'
Simultaneity:	<i>e-d'e-ne eme-re</i> 'not coming' <i>e-ŋesi eme-re</i> 'while somebody did not come (in the past)'
Posteriority:	<i>e-d'eli- eme-re</i> 'until/before somebody comes'
Condition:	<i>e-mi eme-re</i> 'if somebody doesn't come' (ss) <i>e-reki-/e-siki- eme-re</i> 'if somebody doesn't come' (Ds)
Purpose:	<i>e-de- eme-re</i> 'for somebody not to come'
Result:	<i>e-knen- eme-re</i> 'so that somebody didn't come'.

Thus, the auxiliary negative *e-* does not combine with the converbal suffixes *-ksa/-ka(n)im*, *-mnak*, *-mnen/-mmen*, *-čala*, *-d'anma*, *-ktava* and *-vuna* (the negative posterior form *e-d'eli-* corresponds to the positive posterior form in *-dala*). It is remarkable that five positive converbs expressing anteriority correspond to only one negative form *e-ne + -ra* 'not having done something'.

Contextual converbs in the negative form can denote either condition (cf. examples [45 c] and [45 d] with the negative forms *e-mi* and *e-siki-*; the form *e-siki-* used in different-subject constructions is much more frequent than the form *e-reki-* used in the same function), or attendant circumstance [45 a], or purpose (examples [45 b] and [45 f]). Below I give some examples containing negative forms of converbs.

- (45) a. *E-ne suke-ve ga-ra agi-la e-keŋ ɲene-re.*
not-CONV axe-ACC take-NEG.PART forest-ALL not-IMP go-NEG.PART
'Do not go to the forest without having taken the axe.'
- b. *Dolboni-du togo-vi ilači-Ø-m e-de-vi*
night-DAT.LOC fire-REFL.SG burn-NONFUT-1SG not-CONV-REFL.SG
doŋoto-ra.
freeze-NEG.PART
'At night I lit a fire, in order not to get cold.'
- c. *Min-dule esitirga e-mi eme-re tegemi*
I-ALL today not-CONV come-NEG.PART tomorrow
eme-keŋ.
come-IMP.2SG
'If you do not come to me today, come tomorrow.'
- d. *E-siki-s eme-re amin-mi tikul-d'aŋa-n.*
not-CONV-2SG come-NEG-PART father-1SG get.angry-FUT-3SG
'If you do not come, my father will get angry.'
- e. *E-d'eli-v bi mučn-ra edu bi-keŋ*
not-CONV-1SG I return-NEG.PART here be-IMP.2SG
'Stay here until I return.'

- f. *Esi himat tuksa-kallu e-kenen-in bokon-o.*
 now quickly run-IMP.2PL not-CONV-3SG catch-NEG.PART
 'Now run fast so that he can't catch up with you.'

6. Conclusion

Evenki, like most of the Altaic languages, makes extensive use of converbal constructions. It has both specialized and contextual converbs. Seven of them are same-subject converbs taking only the plural suffix. There are also varying-subject converbs which either take the markers of reflexive possession when used in same-subject constructions or the markers of personal possession when used in different-subject constructions. There are also two different-subject converbs which always take markers of personal possession. In addition two converbs (forms in *-mi* and *-da*) may be used in complement clauses. It is remarkable, however, that Tungusic converbs (Evenki converbs included), unlike converbs in other Altaic languages, do not participate in the formation of new temporal or aspectual forms, nor do they form any new conjunctions or postpositions. Within converbal constructions themselves their subject is often omitted since it is transparent in the agreement marker of the converb. Same-subject converbs may be used in different-subject constructions under specific pragmatic conditions, such as overlapping of participants in the converbal construction and the main clause, or the presence of a conditional or a causal interpretation. Cooccurrence of functionally similar converbs within one sentence is rather common and possible restrictions are determined by pragmatic principles.

Abbreviations

ACC	accusative	DS	different-subject
ALL	allative	ENCL	enclitic
ANTE. CONV	converb of anteriority	FUT	future
CMPAR	suffix of comparison	HAB. PART	habitual participle
COM	comitative	HYP	hypothetical
CONV	converb	IMC	imperfective converb
DAT	dative	IMP	imperative
DIMIN	diminutive	IMPF	Imperfective
DIR	directive	INCH	Inchoative
		INSTR	instrumental

IT.PAST	iterative past	PROC	processive
LOC	locative	PROL	prolative
NEG	negative	PRS	present tense
NEG. PART	Fixed form of the notional verb in negative phrases	REC	reciprocal
		REFL. SG	reflexive possession singular
NEUTR	neutral gender	REFL. PL	reflexive possession plural
NOM	nominative		
NONFUT	Non-future	SBJV	subjunctive
PAST	past tense	SEMELF	semelfactive
PERF. PART	Perfective participle	SG	singular
PERS. POSS	personal possession	SS	same-subject
PL	plural	VOL	volitional
PREF	prefix	VS	varying-subject

Notes

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2. For a detailed description of the Evenki tense system see: Nedjalkov–Nedjalkov 1988, 1990.
3. For restrictions on the combination of the imperfective aspect marker *-d'a* with the converbal forms with suffixes *-mnak*, *-mnen/-mmen*, *-čala*, *-dala* and *-knan* denoting punctual actions see below.
4. The present study would have been impossible without the data found in, at least, the following papers devoted to the investigation of Evenki converbs: Konstantinova 1953, 1964; Brodskaja 1980; Gorelova 1980 a; Gorelova 1980 b; Kolesnikova 1966. Some of the examples have been taken from these studies.
5. Participle-based converbs are rather frequent and numerous not only in Tungusic, but also in other Altaic languages (for Karachai data on participial converbs see: Nedjalkov–Nedjalkov 1987 b).
6. In some dialects they have become narrative, for instance, in texts of Barguzin Evenki the frequency of converbs with the suffix *-lesa* exceeds 60 percent of all the verb forms.
7. For a detailed account of the negative forms in Evenki see Nedjalkov (1993).

References

- Bergelson, Mira B.–Andrej A. Kibrik
 this volume “The system of switch-reference in Tuva: Converbial and masdar-case forms”.
- Brodskaja, Larisa M.
 1980 “Pričastnye i deepričastnye konstrukcii v sostave složnopolodčinnogo predloženiia” [Participial and verbal constructions in subordinate clauses], in: Majja I. Čeremisinina (ed.) *Infinitnye formy glagola* [Nonfinite forms of the verb]. Novosibirsk: Sibirskoe otdelnie AN SSSR, 32–43.
- Gorelova, Lilija M.
 1980 a “Funkcii èvenkijskix pričastij i ix otnošeniia k deepričastijam” [The functions of Evenki participles and their relations to converbs], in: Majja I. Čeremisinina (ed.) *Infinitnye formy glagola* [Nonfinite forms of the verb]. Novosibirsk: Sibirskoe otdelnie AN SSSR, 3–31.
 1980 b “O semantičeskix sootvetstviiax meždu prostymi i složnymi deepričastijami v evenkijskom jazyke” [On the semantic correspondences between simple and complex converbs in Evenki], in: Majja I. Čeremisinina (ed.) *Podčinenie v polipredikativnyx konstrukcijax* [Subordination in polypredicative constructions]. Novosibirsk: Sibirskoe otdelenie AN SSSR.
- Haspelmath, Martin
 this volume “The converb as a cross-linguistically valid category”.
- Kolesnikova, Vera D.
 1966 *Sintaksis evenkijskogo jazyka* [The syntax of Evenki]. Leningrad: Nauka.
- Konstantinova, Olga A.
 1953 “Deepričastija v evenkijskom jazyke” [Converbs in Evenki], in: A. Gorcevskij (ed.) *V pomošč' učitelju škol Krajnego Severa, Vyp. 4*. [For help for the teachers of schools of the Far North, Issue 4]. Moscow–Leningrad.
 1964 *Evenkijskij jazyk. Leksika i morfologija* [Evenki: Vocabulary and morphology]. Leningrad: Nauka.
- Nedjalkov, Igor' V.
 in press “Negation in Evenki.”
- Nedjalkov, Vladimir P.–Igor' V. Nedjalkov
 1987 a “On the typological characteristics of converbs”, in: Toomas Help (ed.), *Proceedings of the Symposium on Language Universals*. Tallinn, 75–79.
 1987 b “Deepričastija v karačaevo-balkarskom jazyke” [Converbs in Karachai-Balkar], in: *Lingvističeskie issledovanija* [Linguistic studies]. Moscow: Nauka.
 1988 “Resultative, stative, passive, perfect in Evenki”, in: Vladimir P. Nedjalkov (ed.) *Typology of resultative constructions*. Amsterdam–Philadelphia: Benjamins.
 1990 “Meanings of tense forms in Evenki”, in: *Lingua Posnaniensis* 24: 87–100.

Converbs in Japanese

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1. Introduction

Japanese possesses two main strategies for combining clauses: one makes use of nonfinite verb forms, and the other is to use function words (postpositions, particles, conjunctions) attached to finite verb forms. This paper deals with the morphology, syntax and semantics of nonfinite verb forms used for the expression of adverbial subordination in Japanese. Modern Japanese provides two main types of nonfinite verb forms that are specialized for subordination in nonargument position.

Type 1. Primary converb: a nonfinite verb form that consists of a stem and an inflection (an affix that undergoes diverse alternations at the morpheme boundary and cannot be separated from the stem by any morpheme).

Type 2. Secondary converb: a nonfinite verb form that consists of a primary converb in combination with agglutinative affixes or function words (postpositions, particles, conjunctions).

The morphology of primary converbs and secondary converbs will be described in section 2. In sections 3 and 4 we shall discuss the main functions of primary converbs. Secondary converbs will not be discussed in detail, they will simply be listed in section 2.2 to give a general picture of the converbal system in Japanese. Converbal and nonconverbal adverbials will be compared in section 5.

2. Morphology of converbs

Japanese has three classes of predicates – verbs, predicative adjectives (which denote characteristics, but can occur as main predicates of independent clauses, e.g., *akai* ‘to be red’), and copulas. This paper is concerned mainly with verb forms, although predicative adjectives and copulas can also function as adverbials. Paradigms of the predicative adjective and the copula are considerably reduced and they will be only briefly discussed in section 2.3.

The most productive morphological devices used in verb forms that occur in adverbial subordinate clauses are presented in the following sections.

2.1. Primary converbs

1. The *-te* form (“gerund”)¹ uses the affix *-te/-de/-ite*: *-de* after stems which end in a voiced consonant, except *r*; *-ite* after *s*; and *-te* elsewhere.
2. The *-i* form (“infinitive”) uses the affix *-i/-Ø*: *-i* after consonants; *-Ø* after vowels.
3. The *-tara* form (“conditional”) uses the affix *-tara/-dara/-itara*. The distribution of these allomorphs is parallel to that of the *-te* forms.
4. The *-ba* form (“provisional”) uses the affix *-eba/-reba*: *-eba* after consonants; *-reba* after vowels.
5. The *-tari* form (“representative”) uses the affix *-tari/-dari/-itari*.² The distribution of these allomorphs is parallel to that of the *-te* forms.
6. The *-zu* form (“literary negative infinitive”) uses the affix *-zu/-azu*: *-zu* after vowels; *-azu* after consonants.
7. The *-tatte* form (“concessive”) uses the affix *-tatte/-datte/-itatte*.³ The distribution of these allomorphs is parallel to that of the *-te* forms.

2.2. Secondary converbs

1. The *-temo* form (“concessive”) is the *-te* form plus the focus particle *mo* ‘even, also’.
2. The *-tekara* form (“temporal ablative”) is the *-te* form plus the ablative postposition *kara* ‘after, from’.
3. The *-inagara* form (“concurrent-concessive”) is the *-i* form plus the affix *-nagara*.
4. The *-itsutsu* form (“concurrent”) is the *-i* form plus the affix *-tsutsu*.
5. The *-ini* form (“purposive”) is the *-i* form plus the directional/dative postposition *ni*.
6. The *-ishidai* form (“immediate temporal ablative”) is the *-i* form plus the affix *-shidai*.

2.3. Converb forms of predicative adjectives and copulas

Predicative adjectives do not have the *-zu*, *-tatte*, *-inagara*, *-itsutsu*, *-ini*, *-ishidai* forms. Other forms listed above have special variants for predicative adjectives.

Primary converbs derived from predicative adjectives have *-kute* where verbs have *-te* and *-ku* where verbs have *-i*, but predicative adjectives significantly differ from verbs in that the same-subject use of the converb is morphologically marked: the *-kute* form is used only when the subject of the adverbial clause is not expressed explicitly and is controlled by the subject of the main clause (see section 3 for details).

All secondary converbs as well as all analytic forms that contain the *-te* form of verbs (see section 3.6) have the *-kute* form of predicative adjectives.

Verb forms with *-tara*, *-tari* and *-ba* have *-kattara*, *-kattari* and *-kereba* respectively for predicative adjectives.

Japanese has simple and complex copulas. Simple copulas *da* (nonaddressive) and *desu* (addressive) have the same form *de* as the correlate of the *-i* form,⁴ but the two forms *datte* and *deshite* respectively as correlates of the *-te* form. The correlates of the *-tara* form are *dattara* and *deshitara* respectively. Other adverbial forms are possible only for complex copulas which are combinations of *de* (primary converb of the simple copula) and the verb *aru* 'to be, to take place' (or its lexical equivalents).

3. Contextual primary converbs

We shall use the following terms to explicate the functions of converbs (the terminology, slightly modified, has been adopted from the contributions to this volume by Haspelmath, König, and V. Nedjalkov).

1. If the semantic relation between the converb and the main verb can be determined only from the context, the converb is *contextual*; if the converb expresses a specific semantic relation, the converb will be called *specialized*.
2. If the converb has its own subject, which can be noncoreferential with the subject of the main verb, it is a *different-subject converb*, otherwise it is a *same-subject converb*.
3. The converb will be called *coordinative*, if both (i) the semantic relationship between the converb and the main verb, and (ii) the way of expressing this relation tend to be symmetric, otherwise the converb will be called *subordinative*. (Coordination and subordination will be regarded here not as mutually exclusive but rather as extreme points on a scale, cf. section 3.3).

In principle these three criteria are independent, but certain combinations are much more common than others. Thus coordinatively used converbs are often both contextual and different-subject converbs.

3.1. General characteristics

Contextual converbs in Japanese are the *-te* form, the *-i* form and the *-zu* form (which is more literary and not so frequent). Other primary converbs and all secondary converbs are specialized.

Like almost all Japanese primary and secondary converbs, contextual converbs can be both: (i) same-subject with the implicit subject controlled by the subject

of the main clause; and (ii) different-subject with the subject expressed explicitly as in the independent clause, i.e., with the nominative *ga* or with \emptyset in the environment of topicalizers like *wa*, *mo* etc.⁵ The following examples provide illustration:

- (1) Same-subject *-i* (\emptyset) form of *yose-ru* ‘to move’ and same-subject *-te* form of *ake-ru* ‘to move’. The *-te* form of *kangae-ru* ‘to think over’ is used as a part of the analytic progressive form (see section 3.6):
Ogata Shingo wa sukoshi mayu o yose- \emptyset
 Ogata Shingo TOP slightly eyebrow DOBJ bring.together-CONV
sukoshi kuchi o ake-te nanika kangae-te i-ru
 slightly mouth DOBJ open-CONV something think-CONV be-PRES
fuu datta.
 look COP.PAST
 ‘Ogata Shingo seemed to think something over: [he] somehow brought his eyebrows together and slightly opened his mouth.’ (KY: 8)⁶
- (2) Different-subject *-te* form of *ar-u* ‘to be’, ‘to exist’:
Yasuko wa juugoroku no koro ibiki no kuse ga
 Yasuko TOP fifteen-sixteen ATTR time snore ATTR habit SUBJ
at-te, oya wa kyoosei ni kushin shi-ta-soo
 be-CONV parents TOP correction IOBJ efforts do-PAST-likely
da.
 COP.PRES
 ‘They say that Yasuko snored when [she was] fifteen or sixteen [and] [her] parents did their best [to help her] to get rid [of this habit].’ (KY: 8)
- (3) Different-subject *-i* (\emptyset) form of *shikame-ru* ‘to frown’:
Shingo wa kao o shikame- \emptyset , Shuuichi wa yoi
 Shingo TOP face DOBJ frown-CONV Shuuichi TOP drunkenness
ga same-ta daroo.
 SUBJ abate-PAST TENT
 ‘Shingo frowned, [and] it seemed that Shuuichi got sober.’ (KY: 149)

Both subordinative and coordinative use is possible for contextual converbs, but as will be shown in section 3.3, subordination is more characteristic for the *-te* form.

Voice and aspect is normally expressed in primary converbs if it differs from the voice and aspect of the final verb. In the *-te* form addressiveness may also be expressed. When containing the addressive marker *-masu* the *-te* converb is hyper-polite, while without the addressive marker the *-te* converb shares the

degree of politeness expressed in the final verb (cf. Alpatov 1973: 28–29). Tense and mood are expressed only by the final verb. Person-number agreement does not exist in Japanese.

Here are some examples of the subordinative use of *-te* and *-i* forms.

- (4) Same-subject *-te* form (“manner”) of *kum-u* ‘to (be) unite(d)’:
Son san wa hoka no nihonjin sutaffu o kun-de,
 Song Mr. TOP other ATTR Japanese staff DOBJ unite-CONV
shigoto o shi-te i-ru.
 job DOBJ do-CONV be-PRES
 ‘Mr. Song is working together with Japanese staff.’ (NJ, 12, 1988: 14)
- (5) Same-subject *-i* form (“anteriority”) of *tsuzuke-ru* ‘to continue’:
Marutan san wa Kushiro Ikuo kyooju no shidoo no
 Martin Mrs. TOP Kushiro Ikuo professor ATTR tutelage ATTR
moto, kenkyuu o tsuzuke-Ø, 10 gatsu 27 nichi ni
 under studies DOBJ pursue-CONV October 27 LOC
kekoku shi-ta.
 return.home do-PAST
 ‘Mrs. Martin pursued her studies under the tutelage of Professor Kushiro Ikuo and [then] returned home on October 27.’ (NJ, 12, 1988: 16)
- (6) Same-subject *-i* form (“simultaneity”) of *senkoo su-ru* ‘to major’ (*senkoo* ‘special study’ plus irregular verb *suru* ‘to do’):
Son san wa Kankoku no daigaku de kenchikugaku o
 Song Mr. TOP Korea ATTR university LOC architecture DOBJ
senkoo shi-Ø, sono katawara dokugaku de konpyuutaa o
 major do-CONV this simultaneously on his own computers DOBJ
manan-da.
 study-PAST
 ‘Mr. Song majored in architecture at a Korean university, while studying computers on his own.’ (NJ, 12, 1988: 14)
- (7) Different-subject *-i* form (“result”) of *ar-u* ‘to be’, ‘to exist’:
Chiba daigaku ni wa ryunugakuseiryoo ga
 Chiba university LOC TOP foreign.student.dormitory SUBJ (there)
ar-i, ryunugakusei no botondo ga koko de seikatsu
 is-CONV foreign.students ATTR almost.all SUBJ there LOC life
shi-te i-ru.
 do-CONV be-PRES
 ‘Chiba university has its foreign student dormitory, so most of the foreign students live there.’ (NJ, 12, 1988: 18)

In example (8), the same subject is “shared” by the *-zu* form, the *-i* form and the finite verb. The sentence has the structure V_1 *-zu* (V_2 *-i*, V_3), where *-zu* is a contextual converb subordinated to both V_2 and V_3 (expressing “negation plus manner”, i. e., “not doing V_1 ”), while V_2 and V_3 are coordinated by means of the *-i* converb (the *-zu* form is from *todomar-u* ‘to limit oneself to’, the *-i* form is from *shir-u* ‘to know’, ‘to learn’):

- (8) *Karera wa manab-u dake ni todomara-zu nihon no bunka*
 they TOP study-PRES only to limit-CONV Japanese ATTR culture
o shir-i, nihonjin to yori fukaku kooryoo
 DOBJ learn-CONV Japanese with more deeply relationship
su-ru koto o nozon-de iru.
 make-PRES NOM DOBJ wish-CONV be-PRES
 ‘Not limiting themselves to studies, they wish also to learn about
 Japanese culture and to have a deeper relationship with Japanese
 people.’ (NJ, 12, 1988: 20)

3.2. Semantic interpretation

In most cases the semantic interpretation of a contextual converb in Japanese is governed by general regularities as they are formulated, for instance, in König (1988) and König–van der Auwera (1990). Thus, negative converbs (*-zu* forms and also *-i* and *-te* forms when derived from negative verbal forms) tend to be interpreted not as having temporal relation to the main verb, since “negative descriptions identify facts rather than events” (König 1988: 150). The concessive interpretation is based on knowledge concerning the incompatibility of two events, while the instrumental interpretation is possible when two descriptions may refer to the same event.

But there are also some criteria specific to Japanese. Thus, Tamori (1976: 325–327) points out (without any explanation, however) that some restrictions on the semantic interpretation of *-te* forms derived from progressive (continuative) verb forms exist: they can imply a causal relation or concession in addition to the temporal meaning of simultaneity, but they cannot imply manner and instrument.

3.3. Coordinative vs. subordinative use

3.3.1. The scale of coordinateness

We side with those linguists (Foley–Van Valin 1984; Lehmann 1988; König–van der Auwera 1988) who consider it more fruitful to reject the notion that coordination and subordination are mutually exclusive, and regard them rather as ex-

treme points on a scale. The main principles of the scalar approach to predicate coordination are the following.

Coordination is a syntactic strategy for expressing symmetric situations. Coordinate constructions tend to use symmetric language devices in consequence of the general iconicity principle (cf. Haiman 1985). Thus, the more symmetric (i. e., homogeneous) the coordinated predicates are, the more coordinate is the construction. Thus syntactic constructions form a scale of coordinateness. One extreme of this scale is “minimum of coordinateness” with “true” subordinate adverbial clauses. Another extreme is “maximum of coordinateness” with “true” coordinate clauses.

The position of a sentence on this scale seems to be simultaneously governed by several factors. Most of them deal with different kinds of linguistic symmetry, in that components of the “true” coordinate construction are homogeneous with respect to their morphological, syntactic, semantic and communicative parameters.

In the case of “true” coordination two (or more) clauses should manifest the following characteristics:

- i. The semantic relationship between the clauses should be based on the logical relation of symmetry (e. g., logical conjunction or disjunction)
- ii. The semantic relation should be coded either in every clause or in none of them
- iii. The communicative load should be symmetrically distributed between clauses
- iv. The head predicates of coordinated clauses should be symmetric in expressing main grammatical categories (person-number, tense-voice-aspect etc.), i. e., they must have “the same degree of markedness” (see Bisang, this volume).

Bearing in mind this ideal picture of coordination, we must conclude that coordination by means of a converb is never a “true” coordination, at least in that one clause is marked by a finite and another by a nonfinite form. But variation in other parameters (first and foremost in the semantic symmetry of the inter-clausal relation) may lead to the variation in the degree of coordinateness (see Podlesskaya 1992 a, 1992 b for details).

3.3.2. Contextual converbs on the scale of coordinateness

Only one – specialized – converb in Japanese is prototypically coordinative in that it occurs in semantically and grammatically symmetric contexts: it is the representative *-tari* form (see section 4.1).

Contextual converbs are prototypically neither subordinative nor coordinative. The semantic symmetry in the sentences containing contextual converbs may vary significantly. This variation is often supported syntactically or morphologically. Thus Kuno (1978: 123–124) introduces several tests to distinguish between coordinative and subordinative uses of the *-te* and *-i* forms. Among them is the behavior of the sentence with respect to such syntactic processes as relativization, attachment of an interrogative particle, or the replacement of the subject by a *wh*-interrogative word. Thus sentence (9 a) with an asymmetric (cause-and-effect) relation between clauses can undergo all of these alterations:

- (9) a. *bukeka ga agar-i, minna ga komat-te i-ru.*
 price SUBJ rise-CONV all SUBJ suffer-CONV be-PRES
 ‘Prices rising, all are suffering.’
- b. *bukeka ga agar-i, komat-te i-ru hitotacki.*
 price SUBJ rise-CONV suffer-CONV be-PRES persons
 ‘People who, prices going up, are suffering.’
- c. *bukeka ga agar-i, minna komat-te i-ru ka*
 price SUBJ rise-CONV all suffer-CONV be-PRES Q
 ‘Prices going up, are all suffering?’
- d. *bukeka ga agar-i, dare ga komat-te i-ru ka*
 price SUBJ rise-CONV who SUBJ suffer-CONV be-PRES Q
 ‘Prices going up, who is suffering?’

Sentence (10), by contrast, cannot undergo these alterations because the semantic relation between its clauses is symmetric (based on logical conjunction):

- (10) *Taroo ga Amerika ni ik-i, Hanako ga Furansu ni*
 Taro SUBJ America to go-CONV Hanako SUBJ France to
it-ta.
 go-PAST
 ‘Taro went to America, [and] Hanako went to France.’

In Tamori (1976: 341–355) four further distinctive tests are introduced: pseudo-clefting, equi-NP deletion, subject honorification and replacement of the subject (object) NP by a pronominal copy. All these alterations are characteristic of most “pure” subordinative converbs in Japanese. All of them are easily applied to the *-te* forms, but the *-i* forms can hardly undergo them. Consider, for instance, the pseudo-clefting test (the following examples are borrowed from Tamori [1976: 341]). Sentences (11) and (12) differ only in that (11) contains the *-te* form *tabe-te*, while (12) contains the *-i* form *tabe-Ø* of the same verb *tabe-ru* ‘to eat’, but only (11) can be clefted, as shown in (13).

- (11) *Taroo ga bangohan o tabe-te furo ni hait-ta.*
 Taro SUBJ dinner DOBJ eat-CONV bath LOC enter-PAST
 'Taro took a bath after he ate dinner.'
- (12) *Taroo ga bangohan o tabe-Ø, furo ni hait-ta.*
 Taro SUBJ dinner DOBJ eat-CONV bath LOC enter-PAST
 'Taro ate dinner and took a bath.'
- (13) *Taroo ga furo ni hait-ta no wa bangohan o*
 Taro SUBJ bath LOC enter-PAST NOM TOP dinner DOBJ
*tabe-te/*tabe-Ø da.*
 eat-CONV COP.PRES
 '[The time] when Taro took a bath is after he ate dinner.'

In the same way pronominal copies are only possible with *-te*, but not with *-i* forms, as shown in the following example from Tamori (1976: 353 [slightly modified]):

- (14) ... *Ziroo ga sore; o wat-te/*war-i bensyoo si-na-katta*
 Jiro SUBJ it DOBJ break-CONV compensate do-NEG-PAST
garasu;
 window
 lit. 'the window which, though Jiro broke it, he did not compensate.'

Tamori (1976) concludes that *-te* forms are subordinative, while *-i* forms are coordinative. But this conclusion seems to be too radical because the possibility of semantic symmetry between the *-te* converb and the main verb should not be ignored. For instance, in the following example two clauses are marked by two forms of the same verb *i-ru* 'to be, to exist': the *-te* form *i-te* and the final form, yet the semantic relation between these clauses is close to logical conjunction.

- (15) *Kakukoo ni wa kanarazu nanika no meibutsukoshi*
 every.school LOC TOP surely several ATTR "famous.teacher"
ga i-te, naka ni komedian kaomake no tanoshisa
 SUBJ be-CONV among comedian making.fool ATTR fun
de jugyoo o okona-u hito mo i-ru.
 with lessons DOBJ conduct-PRES persons also be-PRES
 'In every school there are for sure some "famous teachers" and among them there are those who give their lessons in an enjoyable and humorous way.' (NJ, 6, 1988: 17)

The semantic relation between the same-subject *-te* form and the main verb is also often close to logical conjunction:

- (16) *Yon-de hanas-u nihongo bokyaaburarii.*
 read-CONV speak-PRES Japanese vocabulary
 ‘Japanese vocabulary [for] reading and speaking.’

The semantic symmetry between the *-te* form and the main verb may also manifest itself in the fact that in some cases the same semantic constraints apply to the converb and to the final verb. Thus, according to Kuno (1973: 195–199) the *-te* form and the final verb must either both refer to self-controllable events, or must both refer to non-self-controllable events, while such a constraint does not seem to hold for the *-i* form:

- (17) *Joon wa asa oki-te/oki-Ø kao o arat-ta.*
 John TOP morning get.up-CONV face DOBJ wash-PAST
 ‘John got up in the morning and washed his face.’
- (18) *Joon wa asa me o samash-i/*me o samashi-te kao o*
 John TOP morning wake.up-CONV face DOBJ
arat-ta.
 wash-PAST

In (17) both *-te* and *-i* forms are possible because *oki-ru* ‘to get up’ and *arau* ‘to wash’ are both self-controllable, while in (18) the *-te* form is not possible because *me o samas-u* ‘to wake up’ is non-self-controllable.

The *-te* and *-i* forms differ also with regard to the distribution of the communicative load between clauses. This was shown for example in terms of grounding in Myhill–Hibiya (1988) where the authors compare foregrounding features of Japanese clauses containing the *-te* and *-i* forms. They consider such factors as continuation of the same (human or nonhuman) subject and chronological sequencing of coded events and conclude that the *-i* form is favored in cases with no transition from backgrounding to foregrounding or similar discontinuity. This feature of the clauses containing the *-i* form may be treated as a manifestation of a rather high degree of their coordinateness.

Summarizing the above considerations we may conclude that within the framework of the scalar approach towards predicate coordination it is preferable not to treat the *-te* form as subordinative and the *-i* form as coordinative, but to treat the *-i* form as “more coordinative” than the *-te* form.

3.4. Nonverbal use of the *-te* form

The expression of adverbial subordination is the basic, but not the only function of the *-te* form. In some marginal cases it can occur also in the position of the only predicate of a simple sentence. In combination with the copula the *-te* form can serve as a predicate and as an attribute.

3.4.1. The *-te* form in sentence-final position

First, the *-te* form may serve as one of numerous imperatives, cf. example (19):

- (19) *Kyoo no tokoro wa kangae-sase-te.*
 today ATTR around TOP think.OVER-CAUS-CONV
 'Let me think [it] over for today.' (NJ, 11, 1988: 90)

Etymologically *kangaesasete* in (19) is the contraction of the imperative form *kangaesasete kudasai* (the combination of the *-te* converb with the imperative form of the auxiliary verb *kudasaru*). However in modern Japanese the imperative in *-te* is not synonymous with the imperative in *-te kudasai*: the latter is an addressive form and the former is not. In contrast to the *-te* imperatives the *-te* converbs are neutral from the point of view of addressiveness: as was shown in section 3.1, the *-te* converb without the addressive marker shares the degree of politeness expressed in the final verb. Therefore the imperative in *-te* can be treated as a distinct form homonymous with the *-te* converb (see Alpatov 1973: 28–29, 77–79 for details).

Secondly, the *-te* form in women's speech may replace the final verb plus the interrogative particle *ka* or may replace the final verb before interjectional particles *yo*, *ne* etc., cf. example (20), see Alpatov (1973: 29), Martin (1975: 494–495) for details.

- (20) *Jitsu ni jukai no koto ga at-te ne.*
 in fact fabulous ATTR thing SUBJ happen-CONV PRCL
 'You see, what a fabulous thing happened to me!' (NJ, 11, 1988: 48)
- (21) *Kane ga at-te? At-te yo!*
 money SUBJ be-CONV be-CONV PRCL
 'Got money? Sure!' (Martin 1975: 495)

3.4.2. The *-te* form in combination with the copula

As follows from the two main functions of the copula in Japanese, the combination of the *-te* form and the copula can be a predicate, as in (22), and an attribute, as in (23) (if we treat the attributive marker *no* as the attributive form of the copula). According to Martin (1975: 491–494), the *-te* form often has causal meaning when it occurs with the copula.

- (22) *Sumoo ni nat-ta no wa hito ni susume-rare-te*
 sumo IOBJ become-PAST NOM TOP people IOBJ urge-PASS-CONV
desu ka
 COP.ADDR.PRES Q
 'Was it because you were urged by people that you became a sumo [wrestler]?' (Martin 1975: 490)

- (23) ... *eiga o mi-te no tooron.*
 film DOBJ see-CONV (COP)ATTR discussion
 ‘... the discussion after (or ‘connected with’) seeing the film.’ (SU, 4, 1990: 1)

3.5. Postpositions developed from *-te* and *-i* forms

Both *-te* and *-i* forms can lose their syntactic status and serve as a postposition specifying the relationship between a predicate and its complement (cf. the detailed analysis of this phenomenon in Fel’dman 1959). Martin (1975: 581–592) estimates that there exist more than two hundred such newly developed postpositions.

In (24) *tsui-te*, a gerund of the verb *tsuk-u* ‘to be connected with’, functions as a postposition with the meaning ‘about ...’ or ‘concerning ...’.

- (24) *Ryuu-gaku no mokuteki ni tsui-te mo jitsu ni*
 studying.abroad ATTR objectives IOBJ concerning also really
tayooka shi-te i-ru.
 diversification do-CONV be-PRES
 ‘There is also a real diversification of objectives for studying abroad.’
 (NJ, 12, 1988: 13)

In (25) *megut-te*, a gerund of the verb *megur-u* ‘to go round’, also functions as a postposition with the meaning ‘about ...’ or ‘concerning ...’. Note that a subject marker *ga* immediately follows the *-te* form:

- (25) *shigatsu batsuka hirak-u dokushakai wa hinomaru*
 April 20th open-PRES readers.conference TOP national.flag
to kimigayo o megut-te, ga teema de aru.
 and national.anthem DOBJ concerning SUBJ theme COP.PRES
 ‘Themes of the readers conference opening on the 20th of April are those concerning the national flag and the national anthem.’
 (SU, 4, 1990: 4)

The converb and the postposition developed from it function differently in sentence structure, but the grammatical differentiation between them is very vague, because standard verbal inflexion is also partly possible for postpositions. For example, most postpositions derived from verbal stems exist in two forms: *-te*, which is more colloquial, and *-i* which is more literary. The original verbal nature of the postpositions manifests itself also in the fact that some of them may have both addressive and nonaddressive variants, e.g., *tsui-te/tsukimasite* ‘concerning’, cf. Alpatov (1973: 30).

3.6. Analytic forms and complex verbs

Most of the analytic forms in Japanese consist of *-te* or *-i* forms plus auxiliary verbs. The *-te* form is used as the main constituent of aspectual verb forms, imperatives, honorifics and "favors" (forms which denote actions done in favor of some person, mainly the speaker). The *-i* form is used as the main constituent of honorifics and imperatives.

The most productive model of complex verb formation is the *-i* form plus semiauxiliary verb, expressing aspectual meaning, e.g., *yom-u* 'to read' → *yom-i-owaru* 'stop reading', *yom-i-hajimeru* 'begin reading', etc. These constructions should be treated as a single unit (a complex word) for accentual purposes and also because no morpheme can be inserted between the converb and the auxiliary.

4. Specialized primary converbs

4.1. The *-tari* form

This form may designate a situation which represents a number of repeated, alternating or distributed situations, cf. Alpatov (1989), Martin (1975: 566), Var-dul' (1963). The meaning of *X-tari* may be approximately interpreted as "some happenings, for example *X* or something of that kind".

- (26) *Hotondo zen'in ga soto ni ki o*
 almost.all members SUBJ outside IOBJ attention DOBJ
kubat-tari, keikai no me o bikarase-te i-ru
 spread-CONV precaution ATTR watch DOBJ keep-CONV be-PRES
joona kawai wa mattaku na-katta no da.
 like sign TOP quite not.take.place-PAST NOM COP.PRES
 'Most of the members did not show any signs of taking measures
 of precaution, [they] did not, for instance, pay any attention to [what
 was going on] outside.' (AM: 266)

The *-tari* form can enter into the so called representative construction *V₁-tari*, (*V₂-tari*) *suru* where one, two or more predicates have the *-tari* form, while grammatical markers are attached to the final auxiliary verb *suru* 'to do':

- (27) *Tokidoki o-sake o nom-i ni it-tari shi-te*
 sometimes sake DOBJ drink-CONV to go-CONV do-CONV
i-masu.
 be-ADDR.PRES
 'We sometimes go to drink sake (or do something of that kind).'
- (NJ, 12, 1988: 14)

- (28) *watashitachi wa mainichi kotoba o tsukat-te hanashi-tari,*
 we TOP every day words DOBJ use-CONV speak-CONV
kii-tari, kai-tari, yon-dari shi-masu.
 listen-CONV write-CONV read-CONV do-ADDR.PRES
 ‘Every day using words we speak, listen, write, read [and so on and
 so on].’ (AK 2: 69)

If the representative construction contains more than one *-tari* converb, as in (28), then we have one of the most “pure” cases of predicate coordination: predicates are symmetric both from a semantic and a formal point of view, because (a) they are characterized by the same nonfinite *-tari* form, and (b) the semantic relationship between them (“incomplete enumeration”) is very close to logical conjunction. The *-tari* form is a good evidence for the claim that predicate coordination is not limited to the domain of finiteness, i. e., that clauses marked by nonfinite verb forms can also express a high degree of coordinateness.

4.2. The *-tara* and *-ba* forms

Japanese has two specialized conditional converbs – in *-tara* and in *-ba* – and two conditional conjunctions *to* and *nara* used with finite verb forms. The general distribution of conditionals is spelt out in the following.⁷

The difference between *nara* and other conditionals is the most considerable. *A nara C* (where *A* is an antecedent and *C* is a consequent) means ‘I got the information about *A*; *A* normally implies *B*; taking into consideration the implication $A > B$, I utter *C*’. The conjunction *nara* is a prototypical equivalent of *if* in constructions like *If you are so hungry why don't you eat something?*

Three other conditionals do not express pure condition either but rather general implication, because the degree of possibility for the antecedent in *A -ba/-tara/to C* can vary from “real” through “possible” to “unreal”. The degree of possibility for the antecedent is expressed by devices other than conditionals: by adverbs like *moshi* ‘suppose’, by verbal tentative forms, by special analytic constructions, etc. Counterfactuals (if marked at all) can be expressed with an adversative conjunction (like *ga* or *keredomo* ‘but’) placed after the consequent: *A -ba/-tara/to C ga* means ‘if *A* then *C* but [*A* did not take place]’.

Therefore, the antecedent in *A -ba/-tara/to C* may have either a presumptive status – when the speaker *knows* whether *A* took (takes) place; or a predictive status – when the speaker *believes* that *A* will take (takes) place (this belief may be based, for instance, on the speaker’s experience); or a hypothetical status – when the speaker does not assert anything about the possibility of *A*. Further, Japanese conditionals may express not only the relation between two unique

events but also the regular (habitual) relation between *A* and *C* ("whenever *A* then *C*"). Taking into consideration both the status of *A* and the opposition between unique and regular relations we can describe the prototypical functions of Japanese conditionals as shown in Table 1 (the prototypical variants are given in capitals, the nonprototypical but possible variants are given in small letters in brackets).

Table 1. Prototypical functions of Japanese conditionals

	Unique	Regular
Presumptive	<i>TARA/TO</i>	<i>(ba/tara/to)</i>
Predictive	<i>TARA/(ba/to)</i>	<i>TO (tara/ba)</i>
Hypothetical	<i>TARA/BA/(to)</i>	<i>BA/(tara/to)</i>

Table 1. shows that the prototypical function of the converb in *-ba* is to introduce the hypothesis (be the relation unique or regular) and the prototypical function of the converb in *-tara* is to introduce the unique event as an antecedent (be it presumptive, predictive, or hypothetical). The following examples can illustrate the prototypical functions of the conditional converbs.

The converb in *-ba* introduces the hypothetical antecedent of the unique relation:

- (29) *Kaigi ga na-kereba moo ie ni kaet-te*
 meeting SUBJ not.take.place-CONV already home at return-CONV
i-ru hazu desu.
 be-PRES probably COP.ADDR.PRES.
 'If there was no meeting, [he] must be already at home.'

The converb in *-ba* introduces the hypothetical antecedent of the regular relation:

- (30) *Jibun no kangae-te i-ru koto o kuchi ni dasa-na-kereba*
 self SUBJ think-CONV be-PRES NOM DOBJ express-NEG-CONV
komyunikeeshon wa tomat-te shima-imasu
 communication TOP stop-CONV finish-ADDR.PRES
 'If you don't give vent to what you are thinking, communication comes to a halt.' (NJ, 11, 1988: 100)

The converb in *-tara* introduces the unique relation with a presumptive antecedent:

- (31) *Daigaku o sotsugyoo shi-tara isha ni nar-imash-ita.*
 university DOBJ finish-CONV doctor IOBJ become-ADDR-PAST
 'When [he] finished university, [he] became a doctor.'

The converb in *-tara* introduces the unique relation with a predictive antecedent:

- (32) *Kotoshi wa natsu ni nat-tara umi ni ki-te kudasai.*
 this.year TOP summer IOBJ become-CONV sea IOBJ come-IMP
 'Come to the seaside this summer (when summer comes).'

The converb in *-tara* introduces the unique relation with a hypothetical antecedent:

- (33) *kare wa rokuji ni dekake-tara junji ni wa Mosukawa*
 he TOP 6.o'clock at leave-CONV 10.o'clock at TOP Moscow
ni tsui-te i-ru hazu desu.
 to arrive-CONV be-PRES probably COPADDR.PRES
 'If he left at six o'clock, he will probably reach Moscow at ten.'

The conjunction *to* differs from conditional converbs in that it prototypically introduces either the unique relation with a presumptive antecedent, as in example (34), or the regular relation with a predictive antecedent, as in (35):

- (34) *Tookyoo ni kae-ru to Jiroo ni wa mata betsu na*
 Tokyo IOBJ come.back-PRES when Jiro IOBJ TOP again different
sekai ga at-ta.
 world SUBJ be-PAST
 'Back in Tokyo, Jiro returned to a different world.' (NJ, 2, 1988: 58)
- (35) *Nyuushi shiizun ni nar-u to kakushu no*
 entrance.exam season IOBJ come-PRES when different
juken guzgu ga narab-u
 "entrance.exam.goods" SUBJ line.up-PRES
 'When entrance exam season comes, all sorts of "entrance exam goods" are lined up.' (NJ, 6, 1988: 20)

The *-ba* form cannot have a pure temporal interpretation, i. e., it cannot introduce the presumptive antecedent of the unique relation – this is the only type of Japanese conditionals where the *-ba* form is forbidden even as a nonprototypical variant:

- (36) *Kesa wa mado o ake-tara/akeru to/*ake-reba yuki*
 this.morning TOP window DOBJ open-when snow
ga fut-te i-mash-ita.
 SUBJ fell-CONV be-ADDR-PAST
 'It snowed this morning when I opened the window.'

The presumptive antecedent of the regular relation can be introduced by any conditional, but neither of them is here prototypical:

- (37) *Ame ga fur-eba/fut-tara/furu to yasun-da.*
 rain SUBJ fall-if/when rest-PAST
 '[Every time], when it rained, we had a rest.' (Martin 1975: 562)

Note that (37) may also refer to a single event, i. e., "[Once] when it rained, we stopped for a rest". This interpretation would be prototypical for *to* and *-tara* (introducing the presumptive antecedent of the unique relation), but forbidden for *-ba*.

The *-ba* form can also be used coordinatively. In this case the semantic symmetry between the converb and the final verb is supported by morphological devices: in both clauses subjects are marked with the focus particle *mo* 'also'.

- (38) *Seiko mo ar-eba shippai mo ar-u kabu ...*
 success also be-CONV(and) failure also be-PRES stock
 'The stocks which may be successful or unsuccessful ...' (NJ, 11, 1988: 90)

Some analytic constructions are derived from *-ba* forms, e. g., conditional comparatives:

- (39) *yom-eba yom-u hodo ...*
 read-CONV read-PRES degree
 'the more one reads, the more ...'

and debitives:

- (40) *yom-ana-kereba nar-anai*
 read-NEG-COND become-NEG.PRES
 'one must read.'

4.3. The *-tatte* forms

This primary converb is the colloquial equivalent of the secondary converb in *-temo*. Together with finite verb form plus *noni* they express concessive meaning. The difference between converbal and nonconverbal concession in Japanese is generally taken to be that *noni* presupposes the contrast between two facts and hence does not admit "nonreality" of imperatives, provisionals or future forms in the second clause.

According to Martin (1975: 939) the focus particle *mo* 'also, even' can sometimes be omitted in *-te(mo)*, but can also sometimes be added to *-tatte(mo)*. Both primary converbs in *-tatte* and secondary converbs in *-temo* are widely used with interrogative pronouns to form a universal concessive conditional clause.

- (41) *Dare ga ki-temo/ki-tattemo ...*
 who SUBJ come-CONV(even if)
 'Whoever comes ...'

Both *-tatte* and *-temo* forms constitute the analytic permissive (*ki-temo ii/ki-tattemo ii* 'may come', lit. 'even if [it] comes, it is OK').

5. Converbial and nonconverbial adverbial clauses

Two main strategies of combining clauses in Japanese (one using nonfinite verb forms and another using finite verb forms in combination with function words) are equally developed, neither of them can be treated as dominating.

The following four types of connectors are used with finite verb forms for adverbial subordination.

- (a) "Pure" conjunctions like conditional *to*.
 (b) Postpositions like causal *kara*. Clauses with postpositions can be clefted and relativized, which is not the case with "pure" conjunctions:

- (i) $V_1 \text{ } kara \text{ } V_2$ 'V₂ because V₁'
 → (ii) $V_2 \text{ } V_1 \text{ } kara \text{ } COP$ 'V₂ is because of V₁';
 → (iii) $V_1 \text{ } kara \text{ } ATTR \text{ } V_2$ 'V₂ which is because of V₁'.

(c) Form nouns like *ato* 'after', *toki* 'when'. Clauses with form nouns can not only be clefted and relativized, but can also occur in the position of a nominal actant.

(d) Adverbial connectors like *sooshite* 'so'. Adverbial connectors occupy the initial position in the clause, which is a standard position for an adverb in Japanese, while conjunctions, postpositions and form nouns behave like standard auxiliary elements – they occupy the final position in the clause. So the difference between two juxtaposed clauses and clauses coordinated or subordinated by means of adverbial connectors is very delicate and mainly purely semantic.

All possible adverbial extraclausal relations in Japanese can be expressed both by a converb and by the finite verb form plus connectors. Hence the main task of future investigations is to find out which semantic and pragmatic criteria guide the choice between the two strategies.

Abbreviations

ADDR	adressive	NOM	nominalizer
ATTR	attributive	PASS	passive
CAUS	causative	PAST	past tense
CONV	converb	PRCL	particle
COP	copula	PRES	present tense
DOBJ	direct object	Q	interrogative particle
IMP	imperative	SUBJ	subject
IOBJ	indirect object	TENT	tentative
LOC	locative	TOP	topic
NEG	negative		

Notes

1. We find it useful to introduce labels used by Martin (1975) because they are, first of all, more or less accepted by English-speaking Japanologists and, secondly, they can serve as a visiting card of a verb form, although they are not a hundred percent adequate, as shown in the next section.
2. The affix *-tari* (as well as *-tara*) could be treated, formally and historically, as the combination of two affixes *-ta* and *-ri* (or *-ra* – respectively), if it were not for the following fact: in modern Japanese no morpheme can be inserted between *-ta* and *-ri* (*-ra*), while *-ta* as the finite past tense suffix in other cases may be followed by various elements.
3. The attempt to treat *-tatte* as a combination of two affixes seems to be even less convincing than the case of *-tari* or *-tara*. The reason is that the verbal affix *-ta* (finite past) has a standard variant *-katta* for predicative adjectives and then the verbal affix *-tatte* should have the variant **kattatte* for predicative adjectives instead of the actual form *-kuttatte*. Another possible analysis is *te+tte* → *ta+tte* → *tatte* for verbs and *kute+tte* → *kuta+tte* → *kuttatte* for predicative adjectives. This analysis is more consistent, because the verbal affix *-te* has a regular variant *-kute* for predicative adjectives. But the disadvantage is that the affix *-tte* turns out to be the only affix which transfers *-e* to *-a* in the preceding morpheme. This means that we are forced to have a unique morphophonological rule, which is never very plausible (concerning nonfinite forms of predicative adjectives, see also section 2.3).
4. We use the term “addressiveness” (and also “addressive/nonaddressive forms” respectively) to distinguish this category from other types of honorification (cf. the term “addressee-controlled honorification” in Shibatani (1990: 375) which is exact but not compact enough).
5. We find three exceptions among secondary converbs: the subject of the *-inagara* form (when concessively used), of the *-ini* form and of the *-itsutsu* form is always controlled by the subject of the main verb and is left implicit.
6. Japanese examples are taken from: AK = *Atarashii kokugo*. Parts 1–6. Tokyo, 1981, AM = Abe Kooboo, *Moetsukeita chizu*. Tokyo, 1967, KY = Kawabata Yasunari, *Yama no oto*. Tokyo, 1972. SU = *Shisoo undoo*. Tokyo, 1990, NJ = *Nihongo jaanaru*.

7. For a detailed description of syntax and semantics of the Japanese conditionals see Akatsuka (1986); Hinds—Tawa (1975–1976); Inoue (1983); McGloin (1976–1977); Takami (1988); Podlesskaya (1993: 85–106).

References

- Alpatov, Vladimir M.
1973 *Kategorii vežlivosti v sovremennom japonskom jazyke* [Categories of politeness in modern Japanese]. Moscow: Nauka.
- Alpatov, Vladimir M.
1989 “Vyraženie častnyx značenij množstva situacij v sovremennom japonskom jazyke” [Quantification of situations and different ways of their expression in modern Japanese], in: V. S. Xrakovskij (ed.), *Tipologija iterativnyx konstrukcij* [Typology of iterative constructions]. Leningrad: Nauka, 200–207.
- Akatsuka, Noriko
1986 “Conditionals are discourse-bound”, in: Elizabeth Closs Traugott—Alice ter Meulen—Judy Snitzer Reilly—Charles A. Ferguson (eds.), *On conditionals*. Cambridge: Cambridge University Press, 333–351.
- Bisang, Walter
this volume “Verb serialization and converbs – differences and similarities”.
- Fel’dman, Natalija I.
1959 “Otglagol’nye poslelogi v sovremennom japonskom jazyke” [Postpositions derived from verbs in modern Japanese], in: Paškovskij, A. A. (ed.) *Japonskij lingvističeskij sbornik* [Papers in Japanese linguistics]. Moscow: Izdatel’stvo vostočnoj literatury, 96–124.
- Foley, William A.—Robert D. Van Valin
1984 *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.
- Haiman, John (ed.)
1985 *Iconicity in syntax: Proceedings of the symposium on iconicity in syntax, Stanford, June 24–26*. Amsterdam: John Benjamins.
- Haspelmath, Martin
this volume “The converb as a cross-linguistically valid category”.
- Hinds, John—Wako Tawa
1975–1976 “Conditions on conditionals in Japanese”. *Papers in Japanese Linguistics* 4: 3–11.
- Inoue, Kyoko
1983 “An analysis of a cleft conditional in Japanese – where grammar meets rhetoric”. *Journal of Pragmatics* 7: 251–262.
- König, Ekkehard
1988 Review article on Gregory T. Stump 1985. (*The semantic variability of absolute constructions*. [Texts and Studies in Linguistics and Philosophy 25.] Dordrecht: Reidel.) *Studies in Language* 12 (1): 145–152.
- König, Ekkehard—Johan van der Auwera
1988 “Clause integration in German and Dutch conditionals, concessive conditionals, and concessives”, in: John Haiman—Sandra A. Thompson (eds.), *Clause combining in grammar and discourse*. (Typological Studies in Language, 18.) Amsterdam: John Benjamins, 101–133.

- 1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert-Giuliano Bernini-Claude Buridant (eds.), *Towards a typology of European languages*. Berlin-New York: Mouton de Gruyter, 337-355.
this volume "The meaning of converb constructions".
- Kuno, Susumu
1973 *The Structure of the Japanese language*, Cambridge, MA: MIT Press.
1978 "Japanese: a characteristic OV language", in: Lehmann, W. P. (ed.) *Syntactic typology*. Austin: University of Texas Press, 57-138.
- Lehmann, Christian
1988 "Towards a typology of clause linkage", in: John Haiman-Sandra A. Thompson (eds.), *Clause combining in grammar and discourse*. (Typological Studies in Language, 18.) Amsterdam: John Benjamins, 181-225.
- Martin, Samuel E.
1975 *A reference grammar of Japanese*. New Haven: Yale University Press.
- McGloin, Naomi Hanaoka
1976-1977 "The speaker's attitude and the conditionals *to*, *tara* and *ba*". *Papers in Japanese Linguistics* 5: 181-191.
- Murayama, Yasuo
1988 "The condition and the use of the conditionals *to*, *tara* and *ba*". *Papers in Japanese Linguistics* 10: 116-148.
- Myhill, John-Junko Hibiya
1988 "The discourse function of clause-chaining", in: John Haiman-Sandra A. Thompson (eds.), *Clause combining in grammar and discourse*. (Typological Studies in Language, 18.) Amsterdam: John Benjamins, 361-399.
- Nedjalkov, Vladimir P.
this volume "Some typological parameters of converbs".
- Podlesskaya, Vera I.
1992 a "Some approaches to language typology from Japanese", in: *Pan-Asiatic linguistics: Proceedings of the third international symposium on language and linguistics*. Vol. 2. Bangkok: Chulalongkorn University, 764-777.
1992 b "Towards the typology of multipredicate constructions", *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 45 (4): 356-363.
1993 *Složnoe predloženie v sovremennom japonskom jazyke: materialy k tipologii polipredikativnosti* [Complex sentences in modern Japanese: Towards the typology of multipredication]. Moscow: IVRAN.
- Shibatani, Masayoshi
1990 *The languages of Japan*. Cambridge: Cambridge University Press.
- Takami, Ken-ichi
1988 "The syntax of *if*-clauses: Three types of *if*-clauses and \bar{X} -theory". *Lingua* 74: 263-281.
- Tamori, Ikuhiro
1976 "The semantics and syntax of the Japanese gerundive and infinitive conjunctions", *Papers in Japanese Linguistics* 5: 307-360.
- Vardul', Igor' F.
1963 "Značenijskaja funkcija suffiksa *-tari* v sovremennom japonskom jazyke [The meaning of the suffix *-tari* in modern Japanese]", in: Vardul', Igor' F. (ed.) *Japonskij jazyk* [Japanese]. Moscow: Izdatel'stvo vostočnoj literatury, 94-106.

Burushaski converbs in their South and Central Asian areal context

Bertil Tikkanen

1. Geographical and linguistic setting

Burushaski (*Burúšaski*) is an unwritten language isolate spoken by approximately 60 000 to 80 000 people in Western Karakoram in the rugged “transit zone” between Central and South Asia. Originally no doubt stretched out over a larger area in the Karakoram-Hindukush region, it is at present confined to a few mountain river valleys of the Gilgit and Ghizar Districts in northeast Pakistan: the middle portion of the Hunza valley, the upper and middle portions of the opposite Nager valley and, at some distance further west of these, the Yasin valley. The Karakoram Highway, a new version of the Ancient Silk Road running right through Nager and Hunza country and connecting Northern Pakistan with China, has broken the legendary isolation of the Burusho only within the past decade.

The (various) dialects of Hunza and Nager resemble each other rather closely, but the Yasin dialect (“Werchikwar” < Khowar *Weršikwār*) shows marked differences at all levels. (For descriptions and texts of the various Burushaski dialects, see Zarubin 1927; Lorimer 1935, 1938, n. d.; Berger 1974, n. d.; Fremont 1982; Tiffou–Pesot 1989; Tikkanen 1991.) Unless otherwise stated, the examples presented here refer to Hunza Burushaski but may with slight modifications apply also to the Nager and Yasin dialects.¹

The languages surrounding Burushaski belong to three different families: Indo-European (represented by the East Iranian and Indo-Aryan branches), Sino-Tibetan (represented by West Tibetan of the Tibeto-Burman branch) and Turkic (represented by Uigur and Kirghiz). The language of literacy and education is the national language of Pakistan, i. e., Urdu (Central Indo-Aryan), known by most adult males and educated females. (Previously Persian was the language of literacy in Northern Pakistan.) Within the Burushaski-speaking community there is a dwindling Indo-Aryan minority of professional musicians and blacksmiths, i. e., the *Ḍomaakī* (Dumaki) speaking *Ḍoms* or *Bericho*, who are now in the process of abandoning their mother tongue for Burushaski (Lorimer 1939; Buddruss 1983: 9). To the north Burushaski is bordered upon by Wakhi (Pamir Iranian). Sporadic contacts have also occurred with Kirghiz and Uigur (Central

- (1) 'Un-e iškí-ulum í-í-ar jamé-e káa huni
 thou-ERG three-ORD 3MXYSG.POSS-SON-DAT bow-GEN with arrow
yü-ú-m-a.
 3MXYSG.IO-give-ST-2SG.SUBJ
 'You gave an arrow with the bow (a bow and arrow) to his third
 son.'⁵ (< Tikkanen 1991: 20)

However, one and the same “subject” cannot normally apply jointly to intransitive and transitive coordinated finite verbs, but has to be repeated in its appropriate case according to the transitivity of the verb (Berger 1991). For example:

- (2) *Iné bir há-ale hurú-š-á-i dāa (ín-e)*
 that:H man house-LOC sit:DUR-AUX-3MXYSG.SUBJ and (he-ERG)
šapík ší-š-á-i.
 bread eat-DUR-AUX-3MXYSG.SUBJ
 ‘The man sits in the house and eats bread.’ [Construed example]

This might suggest syntactic ergativity. But to demonstrate that, it would be necessary to prove that it is possible to omit an absolutive patient when coreferential with an absolutive subject of a preceding coordinate clause (see Haspelmath 1991 for a lucid discussion of syntactic ergativity). This appears to be possible, but probably only if there is a pronominal prefix that indexes the coreferenced patient:

- (2') *Iné gus há-ale hurú-š-u b-o dāa hír-e*
 that:H woman house-LOC sit-DUR-ST AUX-3FSG.SUBJ and man-ERG
mu-yeé-š-á-i.
 3FSG.DO-see:DUR-AUX-3MXYSG.SUBJ
 ‘The woman sits in the house and the man sees [her].’

2.2. Word order and clause linking

Burushaski is a rather consistent SOV language (modifier + head; NP + postposition). Morphologically it is basically agglutinative, but rather unlike its Indo-Iranian neighbours, it uses not only suffixes but also prefixes in verbal and nominal morphology.

Clause linking is mainly accomplished by means of nonfinite constructions based on infinitives, (relative) participles and converbs. However, conditional and concessive subclauses are finite. Causal, temporal and relative subclauses may be nonfinite or finite. Finite subclauses may be introduced by a subordinating conjunction (*bēšal* ‘when’, *béseke* ‘because’, *ágar* ‘if’, *aqhanaá* ‘if, although’, *ke/ki* ‘that’, etc.) or a cataphoric interrogative pronoun (*ámin* ‘who’, *mén* ‘(those) who’, etc.). Conditional and generic/indefinite finite subclauses are often marked by a phrasal or clause-final particle/connective *ke* (Yasin *ka*) ‘too, also, even; and; if, when’ (see examples [21] and [49]), or *kúli* ‘even, (-)ever’. Complements of verbs of utterance and cognition are either nonfinite or finite. When finite, they are usually followed by a complementizer (anterior converbs of the quotative verb *sén-* (Yasin also **xáten-*) ‘to say’, in Nager alternatively *ét-* ‘to do; to speak [a language]’). Nowadays the Persian/Urdu conjunction *ke/ki* ‘that’ is gaining ground as a complementizer.

3. The general structure of the Burushaski verb

The verb possesses both finite and nonfinite forms, which differ as to morphological structure and syntax. Only finite forms may as a rule do duty for predicates of independent clauses.

3.1. The system of finite verb forms

Finite verb forms show person-number (in the third persons also gender/class) agreement with one or two (expressed or latent) arguments (participants) of the clause:

- i. The absolutive/ergative “subject” (subject-agent) is marked by means of an obligatory “*subject suffix*” (SUBJ) which is suffixed to the verb root after any possible derivational, aspectual and/or participial/auxiliary formatives,⁶ for example:

- (3) *gál-i* < *gál-* ‘to break (intr.)’
break-3MXYSG.SUBJ [CON]
‘(if/when) it breaks, broke’
- (4) *man-im-i* < *man-* ‘to become (volitional or y subject)’
become-ST-3MXYSG.SUBJ [PRET]
‘it/he became’

- ii. The ‘most affected, sentient, or salient participant’ is marked by means of a personal *pronominal prefix*, which may refer to: (a) the dative/genitive “indirect object” (IO) or beneficiary (BEN); (b) the absolutive causee (CAUSEE), “direct object” (DO) or “nonvolitional experiencer-subject” ([EXP]SUBJ) (cf. Bashir 1985; Morin–Tiffou 1988: 495–500; Berger n. d. sections 10.35–10.51).

The personal pronominal prefix⁷ precedes the root or derived stem, but may itself be preceded by the derivational prefix *d[V]*-⁸ and/or the negative prefix (*a-*, *oó-*). For example:

- (5) *gu-yeéi-um-o* < *-yeéi-* ‘to see’
2SG.DO-see-ST-3FSG.SUBJ [PRET]
‘she saw you’
- (6) *gu-čbí-č-um-an* < *-čbí-* ‘to give (ysg object)’
2SG.IO-give-DUR-ST-HPL.SUBJ [FUT]
‘the will give it to you’

The finite verb also expresses: (iii) *mood* (indicative, conative, imperative, optative [three varieties], conditional); (iv) *aspect-tense* ([a] aorist tenses [unmarked]: preterite, perfect, pluperfect; [b] durative tenses [marked: -č-/č-/j-/j-/y-]: present, future, imperfect; the Yasin dialect has two more past tenses); (v) *secondary aspect* (progressive, continuative, retrospective, iterative, stative); (vi) *voice* (active, passive [agent-backgrounding]); (vii) *valence* (derived transitive or intransitive and benefactive/causative stems); and (viii) *polarity* (positive, negative [marked: *a-*, *oó-*]).

The arrangement of morphemes in finite synthetic verb forms can be represented by the following simplified diagram (only basic allomorphs are given):⁹

[a/oó]-[d]-[prn.pr]-[s]-√-[*ya]-[č]-[a]-[(V[m])]/[s/če]-subj.suff.-[AUX]-[a]
 NEG D prn.pr CAUS ROOT PL.SUBJ DUR 1SG.SUBJ ST OPT/COND subj.suff.-AUX-Q

Examples of synthetic finite verb forms are the following:

- (7) *di-mé-s-man-um-o* < *d.sman* 'to give birth to somebody' << *-mán* 'to become'
 D-1PL.DO-CAUS-become-ST-3FSG.SUBJ
 'she gave birth to us'
- (8) *a-tí-mi-s-man-u-wá-i-a?*
 NEG-D-1PL.DO-CAUS-become-ST-AUX-3MXYSG.SUBJ-Q
 < **a-tí-me-s-man-um bá-i-a* (Ys. *a-tí-mi-s-main-um bá-i-a*)
 'has he not given birth to us?'

It will be observed that most of the finite forms are really subject-suffixed "static" (adjectival) participles or (contracted) periphrastic formations, e.g., preterite = participle + subject suffix (e.g., *hér-um-an* 'they cried'), future = durative + participle + subject suffix (*hér-č-um-an* 'they will cry'), present = durative + (truncated participle) + (truncated) auxiliary + subject suffix (*hér-č-á-an* 'they cry', *hér-č-u b-o* 'she cries'), and imperfect = durative + (truncated participle) + ([truncated] auxiliary) + subject suffix + participle (*hér-č-á-m* 'they/you/we were crying', *hér-č-u b-o-m* 'she was crying').

3.2. The system of nonfinite verb forms

Nonfinite verb forms express only the first of the aforementioned participants. In other words, the slot for the subject suffix is empty or taken by some nonfinite formative. For example:

- (9) *a-tí-mi-s-man-as-ar*
 NEG-D-1PL.DO-CAUS-become-INF-DAT (=DS.CONV.ANT)
 'on not giving birth to us'

- (10) *nu-kú-čī-n*
 CP-2SG.IO-give-CP
 'having given it to you'

Person-class-number agreement is consequently reduced to the second (or third) argument in converbs, participles and infinitives.

However, some volitional and most *nonvolitional* (*nonactive*) intransitive verbs obligatorily index the subject twice, both as a pronominal prefix (the "experimenter" role of the subject) and as a subject suffix (the generalized "actor" role of the subject). For example: *d-šqalt-* 'to arrive', *-ír-* 'to die', *-mán-* 'to become [nonvolitional subject]' vs. *man-* 'to become [volitional or y subject]', *-yúri-* 'to become immersed, sink' vs. *yúri-* 'to immerse oneself'. The same applies to two common volitional intransitive verbs (*ní-* 'to go' and *jú-* 'to come') in some of their finite and/or nonfinite forms (e.g., conjunctive participle, i.e., anterior same-subject converb).

In these instances there is consequently full person-class-number agreement with the subject through the pronominal prefix also in the nonfinite paradigms, e.g., *n-ü-n* 'he having gone',¹⁰ *nu-móo-n* 'she having gone'; *d-áa-n* 'I having come', *dí-mée-n* 'we having come'; *da-má-šqalt* 'you having arrived', *d-ó-šqalt* 'they having arrived'; *ní-mí-man* 'we having become', *na-má-man* 'you having become'; *i-yúri-as-ar* 'on his/its having sunk'; *u-yúri-as-ar* 'on their having sunk', etc.

The nonfinite verb is unable to express any of the secondary verbal categories, except aspect in conjunction with relative tense (aorist-anterior vs. durative-simultaneous/posterior).

There are the following nonfinite forms (A = infinitives/gerunds, B = participles, C = converbs):

- A 1. [Aorist] *infinitive/habitual relative participle/agent noun* (*-[á]as*), e.g., *bér-as* '(to) cry; crying; crier'.
- A 2. [Aorist] '*supine-infinitive*' (*-[i]š*), used in complements of certain phasal and modal verbs and temporal postpositions, e.g., *bér-iš* '(be able to: -. *-man-*) cry; (until/before: *qháa*) crying'.
- B 1. [Aorist] *participle* (*-[u/i/a]m*), also used as an infinitive or declinable verbal noun in Yasin, e.g., *bér-um* '(who/that) cried'.
- B 2. *Durative participle* (*-č-u-m*), used as such only in Yasin, where it also has infinitival function, e.g., **bér-č-um* '(to) cry; crying'.¹¹
- C 1. *Primary converb* (that is, formed by means of exclusively converbal formatives): *Anterior copulative-contextual*¹² *same-subject converb* i.e., "conjunctive participle" (*n[V]- '√--[i]n*)¹³, e.g., *nu-bér(?-in)* 'having cried, cried and then ...'.
- C 2–18. *Secondary specialized converbs* (i.e., quasi-converbs < declined participles or infinitives/verb stems):

C 2–3. *Simultaneous same-subject temporal/manner converbs* (locative or superessive of the durative participle), e. g., *hér-č-um-e* ‘(while/by) crying’ (“present participle”), *hér-č-um-aṭe* ‘(while/by) crying’.

C 4–5. *Simultaneous temporal open-subject converbs* (i. e., inessive of the aorist participle or infinitive), e. g., *hér-um-ulo*, *hér-as-ulo* ‘while/at the time of crying’.

C 6–11. *Anterior temporal different-subject converbs* (i. e., dative, ablative or *káa-* comitative of the aorist participle or infinitive; for Yasin see also C 13–15, e. g., *hér-um-ar*, *hér-um-čum* (*ilji*), *hér-um-e káa*, *hér-as-ar*, *hér-as-čum ilji*, *hér-as-e káa* ‘on, after crying’.

C 12. *Anterior instrumental same-subject converb* (i. e., superessive of the aorist participle), e. g., *hér-um-aṭe* ‘by crying/having cried’.

C 13–15. *Purposive (final) same-subject converbs* (i. e., dative of the durative stem¹⁴ or infinitive, *gáne-*purposive of infinitive), e. g., *hér-č-ar* ‘in order to cry’ (Yasin also: ‘on crying [different subject]’, *ma-y-áar* (Yasin: *ma-y-á-ya*) ‘in order to become’ (Yasin: also ‘on becoming [different subject]’), *hér-as-ar*, *hér-as-e gáne* ‘for crying, in order to cry’.

C 16. *Negated anterior same-subject converb* (i. e., [superessive of] the negated aorist participle), e. g., *oó-ar-um (-aṭe)* < **oó-her-* ‘without crying/having cried’. The negated “conjunctive participle” occurs only sporadically in the mechanical repetition of a preceding negated finite verb in Nager (Berger n. d.: section 14.19).

C 17. *Improper converbs*:

a. *Phrasal converbs*: Participles or infinitives headed by temporal or circumstantial adverbs or postpositions, e. g., *hér-um kéén-ulo/wáqt-ulo* ‘at the time of crying’, *hér-um ilji/ičiáṭe* ‘after crying’, *hér-as-čum yar* ‘before crying’, *hér-iṣ qháa* ‘until, before crying’, *hér-um juán* ‘as if crying’, etc.

b. *Hybrids*: Declined finite verbs: *sén-a bá-ṭe* ‘upon my having said’, *sén-á-ṭe (ke)* ‘on his/your having said’, *man-ú-wá-ṭe* ‘upon his/your having become’ (Lorimer 1935: section 407; Berger n. d.: section 16.52; Tikkanen 1991: footnote 22).

The morphosyntactic distribution of nonfinite forms as participles (adjectival with possible nominalization), converbs (“adverbial” or copredicative) and infinitives (nominal or complemental) obtains regardless of phylum and branch in almost all the Central and South Asian languages (ancient as well as modern), although the subsystem and functional specializations may vary (e. g., Burushaski, Shina, Khowar, [Classical] Tibetan, and Bengali have combined infinitives and relative participles).

While simultaneous converbs are almost universal in Eurasia, the anterior same-subject copulative(-contextual) converb is chiefly restricted to South(-western) and Central Asia (including also Korea and Japan). Here I will concentrate on the most frequent and semantically most versatile converb, i. e., the anterior same-subject copulative-contextual converb (abbreviated henceforth as CP or

conjunctive participle, the standard name for this type of category in modern South Asian linguistics). The role of the other converbs can best be described in terms of their contrastive relations to the conjunctive participle. For the sake of interest, I will occasionally digress into brief comparisons with converbs of other South and Central Asian languages.

4. Syntactic functions of converbs

In Burushaski the converbs are, with a couple of exceptions, syntactically monofunctional. They are incapable of modifying a noun (like participles) or complementing a verb or adposition (like infinitives, supines and verbal nouns).

An exception are the quotative verbs *sén* 'to say' (etc.), the anterior converbs of which are employed as complementizers of predicates of saying and some perceptual and mental processes, for example:

- (11) [[(*In d-ii* *bá-ʔ*)S-COMP *nu-sé* COMP
(s)he D-(come)-3MSG.SUBJ AUX-3MSG.SUBJ CP-say
je d-á-yal-a-m]s
I D-1SG.SUBJ-hear-1SG.SUBJ-ST
'I heard that he has come.'
lit. "'He has come", having said, I heard.' (T B9)

Parallel constructions are found widely in South and Central Asia (cf. Hock 1982; Tikkanen 1988: 312–314; Bashir [to appear]).

5. Syntactic linking of converbs

The converbal clause is usually linked without any connective to the main (i. e., superordinate) clause, which may be either finite or nonfinite. Any number of converbal clauses may be juxtaposed to each other. The converbal clause typically precedes the main clause. Especially when backgrounded, it may occasionally follow the main clause or even be incorporated within the latter. For example:

- (12) *Iné garoóni nu-mú-cu-n.* *dayóan, du-mó-sku-n,*
 that:H bride CP-3FSG.DO-take-CP flour D-3FSG.DO-lower-CP
móo-díl-um-an.
 3FSG.BEN-throw-ST-HPL.SUBJ
 'Taking the bride along, they threw flour on her [to welcome her],
 having helped her down [from the horse].' (Tikkanen 1991: 67)

Occasionally, converbs are amplified with postpositions, e.g., *ichúate* ‘after’ (Berger, n. d.: section 14.17). Sometimes the clause-final particle *ke* ‘too, even, -ever; and, when, if’ is annexed to the conjunctive participle clause, which may then become absolute (i.e., receive an independent subject, cf. section 6.3). For example:

- (13) *In ke phéel mu-mán-um-o.* *Phéel*
 (s)he too failure 3FSG.SUBJ-become-ST-3FSG.SUBJ Failure
nu-mú-man ke, ye joṭ iné-e
 CP-3FSG.SUBJ-become when now young (s)he-GEN
d-i-ču é-s-im-i.
 D-3MXYSG.DO-bring(IMPV) 3MXYSG.IO-say-ST-3MXYSG.SUBJ
 ‘She too failed. When she had failed, he [i.e., the King] said: “bring now in the young one’s [food]!”’ (Tikkanen 1991: 332–333)

Very rarely, the clause-initial conjunction *dáa* ‘again, anew, more; then, and’ is used after the conjunctive participle clause to introduce the main clause:

- (14) *Harált di-áari-as i-čhú-ate,* *níronaay du-ús-in,*
 rain D-rain-INF 3MXYSG.POSS-after-SUP rainbow D-emerge-CP
dáa sa du-ús-im-i.
 and sun D-emerge-ST-3MXYSG.SUBJ
 ‘After the rain had stopped, a rainbow appeared, and the sun came out.’ (lit. ‘After the rain having stopped ...’) (T A34)

6. Coreference restrictions on implicit/explicit subject of converbs

Converbs are often controlled by their superordinate clauses as regards their (implicit) “subject”. It has been argued (cf. König–van der Auwera 1990: 338–341 with references) that different-subject converbs presuppose same-subject converbs. This is confirmed by Burushaski, where the only primary (non-derived) converb, the conjunctive participle, typically displays coreference of the implicit, more rarely explicit subject (as defined in section 2) with the expressed, latent or generic subject (or experiencer) of the superordinate clause. The simultaneous same-subject converb behaves in the same way. Especially when there is no such coreference, different-subject or open-subject participle/infinitive-based secondary converbs (quasiconverbs) are resorted to. Alternatively, coordinate or paratactic finite clauses are also employed.

When the main verb is transitive and the converb is intransitive, the subject case conflict is normally resolved in favor of suppressing the coreferential converb subject. However, in some cases, it is the ergative main clause subject that is suppressed, the case of the shared subject being determined by the nearest converb to the right (15). A parallel situation has been observed for Gultari Shina by Hook (to appear: part 3, section 4).

- (15) *In/ 'In-e* *d-i-tal*¹⁵ *şapík*
 (s)he(ABS)/(s)he-ERG D-3MXYSG.SUBJ-wake(CP) bread(x)
şí-m-i.
 eat(x.DO)-ST-3MXYSG.SUBJ
 'Having woken up, he ate bread.' (Berger n. d.: section 14.20)

The converb is thus constructionally more versatile than a finite verb, which, as will be recalled, does not allow the elliptical deletion of a different-case coreferential subject (cf. example [2]).

6.1. Quasi-absolute constructions with same-subject converbs

As in most South and Central Asian languages, the coreference restriction for same-subject converbs is semantic (*constructio ad sensum*), or even pragmatic (salience-determined), rather than morphosyntactic. Even when the subjects are not coreferential, the superordinate clause subject tends to be referentially part of the converb subject, or the superordinate clause is a "non volitional experience clause" containing an oblique animate experiencer or experiencing/affected possessor that is coreferential with the implicit converb subject. (It will be observed that when the subject of the converbs is not controlled by the superordinate clause subject, the converbal clause is always expressive of a propositional restriction on the superordinate clause, cf. section 9.)

Such loose constructions may be called "quasi-absolute", inasmuch as they adhere to the basic rule of control through the most agentive or, in experience clauses, affected participant, for example:

- (16) *Dáudo* *nu-şé-n* *já-a* *o-ól* *qharáap*
 meat-gruel CP-eat(Y.DO)-CP I-GEN 1SG.POSS-stomach bad
man-im-i.
 become-ST-3MXYSG.SUBJ
 'Having eaten *daudo*-soup, my stomach turned bad.' (T A30)
- (17) *N-ii-n.* *iske* *tík-çe*
 CP-3MXYSG.SUBJ-(go)-CP three earth-ADESS
yá-č-um-e *maláq* *n-ii-n,*
 hit-DUR-ST-LOC(=SS.CONV.SIM) tumbling CP-3MXYSG.SUBJ-(go)-CP

- badá é-er a-pál-im-i.*
 step 3MXYSG-DAT NEG-fall-ST-3MXYSG.SUBJ
 'Having gone, striking thrice (his head) on the ground, having tumbled over, his step did not fall to him (i. e., he was unable to walk).'

(Tikkanen 1991: 382)

6.2. Semiabsolute constructions with same-subject converbs

More rarely the subject of the same-subject converb is expressed explicitly (in its expected grammatical case) when different from the superordinate clause subject. But even in these instances, the converb subject (or the whole converbal clause) is referentially involved in the superordinate clause, e. g., as a cause or source, more rarely patient. The converb subject may even be a hyperonymous concept which includes the superordinate clause subject referents as intersecting subsets (cf. example [29]).

These loose constructions may provisionally be called *semiabsolute*, because they do not, strictly speaking, adhere to the basic rule of coreference, and yet they are not wholly unrestricted as to coreferentiality. For example:

- (18) *Yáare garnét prať nu-má Sapháa*
 later grenade bang CP-become Sapháa
i-ír-im-i.
 3MXYSG.SUBJ-die-ST-3MXYSG.SUBJ
 'Later a grenade exploded and Sapha died (of it/the explosion).'
- (19) *Tá-an d-ti-n, isé tá-an-e*
 leopard-SING D-3MXYSG.SUBJ-(come)-CP that:X leopard-SING-GEN
i-súmal i-ti-aťe akhíl akhíl
 3MXYSG.POSS-tail 3MXYSG.POSS-after-SUP thus thus
ét-im-i.
 do-ST-3MXYSG.SUBJ
 'The leopard having come, he tried to catch that leopard's tail like this.' (Berger n. d.: section 14.17)
- (20) *Há-alar nu-mú-ču-n, bá-ale šútin-aťe ĩap*
 house-ILL CP-3FSG.DO-take-CP house-LOC hearthstone-SUP touch
n-e ba ét-um-a.
 CP-do kiss make-ST-3FSG.SUBJ
 'When they had taken her along to the house, she touched the hearthstones in the house and kissed her fingers (in a sign of respect for the house she had not previously visited).' (Tikkanen 1991: 69)

- (21) *Jo-ón du-qhár-č-um-e, Zungáatin-e*
 apricot-PL D-bloom-DUR-ST-LOC(=SS.CONV.SIM) Z.-GEN
girám-ular asqúr-in d-ü-m-i ke,
 village-ILL flower-PL D-3XMYSG.SUBJ-(come)-3XMYSG.SUBJ when
ban dastúur-an b-il-üm ...
 one:XY custom-SING be-3YSG.SUBJ-ST
 'The apricots coming into blossom, when the flowers came to the
 village of Zungating, there was a custom ...' (Lorimer 1935, 2: 320,
 l. 1; 1935, 1: section 363)

Sentences with semiabsolute conjunctive participle clauses often refer to the weather or some natural or human physical or mental condition (cf. example [14]).

- (22) *Tisqán d-ü-n-in bun čhís-čum qha*
 earthquake D-3XMYSG.SUBJ-(come)-CP-CP boulder cliff-ABL down
i-wál-im-i.
 3XMYSG.SUBJ-fall-ST-3XMYSG.SUBJ
 'An earthquake came and a boulder fell down from the mountain.'
 (T A33)
- (23) *Harált di-áari-as ban nu-mán-in niironaay*
 rain D-rain-INF finished CP-become-CP rainbow
du-ús-im-i.
 D-emerge-ST-3XMYSG.SUBJ
 'The rain stopped and a rainbow appeared.' (T A34)
- (24) *'In-e ačáanak muç n-e n-á-dil-in*
 (s)he-ERG suddenly fist CP-do CP-1SG.DO-strike-CP
a-múpuş taq i-mán-im-i.
 1SG.POSS-nose broken 3XMYSG.SUBJ-become-ST-3XMYSG.SUBJ
 '(S)he suddenly hit me with his (her) fist, and my nose got broken.'
 (T A39)
- (25) *Hunç girü-če n-i-yan(-in) qha*
 arrow goat-ADESS CP-3XMYSG.SUBJ-hit(-CP) down
wál-im-i.
 (3XMYSG.SUBJ)fall-ST-3XMYSG.SUBJ
 'The arrow hit the mountain goat and (it, i.e., the goat) fell down.'
 (T A32)

Such semiabsolute constructions are also encountered in modern Indo-Aryan (26) and especially Dravidian (27) languages.

- (26) Hindi-Urdu (Davison 1981: 122 footnote)
Bāṇ lag-kar hiraṇ mar ga-y-ā.
 arrow hit-CP deer die GO(PRET)-PRET-3MSG
 'The arrow having struck, the deer died.'
- (27) Tamil (Steever 1988: 11, example [11 a])
Maḷai pey-tu, veyil aṭi-ttu, vāṇavil tōṇr-iy-atu.
 rain rain-CP sun beat-CP rainbow appear-PRET-3NEUT.SG
 'It rained, the sun shined, and a rainbow appeared.' Cf. (14)

Klaiman has shown that exceptions to the coreference restriction of conjunctive participles in Bengali occur mainly under a condition that excludes double agents, i. e., any specified, volitional subject in a conjunctive participle construction is construed as the subject of each component clause (Klaiman 1983: 145). I have found only a few counterexamples of Klaiman's "No Double-Agent Condition" in Burushaski (cf. example [28] and section 6.3).

Occasionally the conjunctive participle subject is a "hyperonym", which includes the referents of the subject(s) of the superordinate clause as intersecting members or subsets of a set:

- (28) *Daa muu ke Misgari isee-t-ar n-u-n*
 and now too Misgaris it:X-SUP-DAT CP-3HXPL.SUBJ-(go)-CP
hir-i-e salaam e-č-a-an, guš-īṇant-e
 man-PL-ERG greeting make-DUR-AUX-HPL.SUBJ woman:PL-ERG
u-rīṇ ēltala-i bá-an.
 3HXPL.POSS-hand wave-DUR AUX-HXPL.SUBJ
 'And even now Misgaris go to it (the stone-shrine Aqtash), and the (Misgari) men greet it and the (Misgari) women wave their hands (at it).' (Lorimer 1935, 2: 290, l. 6–7)

To avoid semiabsolute and genuinely absolute constructions different-subject converbs or finite subordinate or coordinate constructions are often resorted to, for example:

- (29) *Yáare garnét praṭ*
 later grenade bang
man-úm-ar/man-áas-ar,
 become-ST-DAT/become-INF-DAT(=DS.CONV.ANT)
Sapháa i-ir-im-i.
 Sapháa 3MXYSG.SUBJ-die-ST-3MXYSG.SUBJ
 'Later on, owing to a grenade exploded, Sapha died (of it/the explosion).'

- (30) *Harált di-áart-as ban*
 rain D-rain-INF finished
man-im-i/man-ás-ar, *níironaaŋ*
 become-ST-3MXYSG.SUBJ/become-INF-DAT(=DS.CONV.ANT) rainbow
du-ús-im-i.
 D-emerge-ST-3MXYSG.SUBJ
 'The rain stopped and a rainbow appeared.' (T A34)
- (31) *Dáudo šé-yas-ium já-a o-ól qharáap*
 meat-gruel eat-INF-ABL I-GEN 1SG.POSS-stomach bad
man-im-i.
 become-ST-3MXYSG.SUBJ
 'After/Because of having eaten *daudo*-soup my stomach turned bad.'
 (T A30)
- (32) *'In-e ačáanak muç n-e*
 (s)he-ERG suddenly fist CP-do
a-dél-as-ar a-múpuş taq
 1SG.DO-strike-INF-DAT(=DS.CONV.ANT) 1SG.POSS-nose broken
i-mán-im-i.
 3MXYSG.SUBJ-become-ST-3MXYSG.SUBJ
 'On his (her) suddenly hitting me with his (her) fist, my nose went
 into pieces.' (T A39)

When the conjunctive participle subject relates to the weather, but the superordinate clause subject is animate, the conjunctive participle is out of place. The reason for this must be that an animate overt superordinate clause subject cannot be referentially part or "co-hyponym" of a "weather subject" (contrast example [14]).

- (33) *Harált di-áart-as ban man-ás-ium/*nu-mán-in sis*
 rain D-rain-INF finished become-INF-ABL/CP-become-CP people
qboş u-mán-um-an.
 happy 3HXPL.SUBJ-become-ST-HPL.SUBJ
 'The rain stopped and the people became happy.' (T A35)

6.3. Genuinely absolute constructions with same-subject converbs

Very rarely, except sometimes in proverbs (several examples in Tiffou (1993)) and the mechanical repetition of the preceding predicate at the beginning of a sentence in narrative discourse, the subject of the conjunctive participle shows no referential contiguity with any participant of the superordinate clause. (Also

compare example [13].) I have found no corresponding use of the simultaneous same-subject converb.

- (34) *Čün-e baadšaa, ye ma kbole buruč-a-in, nu-sén,*
 China-GEN king(ERG) now you here sit:PL.SUBJ-IMPV.PL CP-say
iné jamáat ó-ltik tail áman-e káa
 (s)he wife 3HXPL-both thus peace-GEN with
buruč-a-m-an.
 sit:PL.SUBJ-ST-HXPL.SUBJ
 'When the *King* of China said: "Come on now, you settle down here!", *he* (i. e., the prince and his) wife both settled down thus in comfort.' (Tikkanen 1991: 147)
- (35) *N-ún-n, téel-um ú-ar ruqsát*
 CP-3HXPL.SUBJ-(go)-CP there-ABL they-DAT permission
ét-um-an. Ruqsát n-e, u waapás téel-um
 do-ST-HPL.SUBJ permission CP-do they back there-ABL
du-wáš-a-n ní-m-an.
 D-leave:PL.SUBJ-CP go-ST-HPL.SUBJ
 'Having gone, he then bid farewell to them. Having bid farewell (i. e., When *he* had bid them farewell), *they* left and went back from there.' (Tikkanen 1991: 77)

Peter Edwin Hook has suggested to me in a letter that the noncoreferential conjunctive participles *ruqsát ne* in (35) and *ghosbaamadiid ne* in (41) might be explained as frozen formulae. Although this would be an attractive explanation, I do not recall having come across these expressions as lexicalized items.

Another type of absolute construction is exemplified by (36), in which the conjunctive participle clause is completed with a time adverbial:

- (36) *Ho Saüid Šaa n-i-ir-in béeruman den-ıŋ-čum ilji,*
 then Saüid Šaa CP-3MXYSG.SUBJ-die-CP some year-PL-ABL after
Hünzu-kucı Gulmēt-aŋ-ar bol ni ba-m, sé-i
 Hunza-ites Ghulmet-SUP-DAT troops go AUX-ST say-DUR
bá-an.
 AUX-HPL.SUBJ
 'Then some years after Sayid Shah had died, the Hunzaites went up against Ghulmet in armed forces, they say.' (lit. 'Sayid Shah having died after some years') (Lorimer 1935, 2: 296, l. 3–4)

These loose constraints on the coreference of same-subject converbs are paralleled and even surpassed in other South and especially Central Asian languages (cf. Tikkanen 1987 a: 153–154; 258–259, 316; Schulz 1978; Juldašev 1977).

7. Relative tense

The anterior converbs contrast paradigmatically with the simultaneous converb(s) in terms of basic relative tense or aspect: anteriority (or aorist aspect) vs. simultaneity (or durative aspect). The relative tense is independent of the aspectual character (punctual, telic, durative, stative) of the verbs in question:

- (37) *Bas, du-wál-as-ar, in*
 enough D-fly-INF-DAT(=DS.CONV.ANT) (s)he
yás-aṭe tik é-č-um-e,
 (3MXYSG.POSS)head-SUP earth DO-DUR-ST-LOC(=SS.CONV.SIM)
hér-č-um-e, tboš phar nu-má
 cry-DUR-PTCP-LOC(=SS.CONV.SIM) anew back CP-become
d-i-was-im-i.
 D-3MXYSG.SUBJ-stay-ST-3MXYSG.SUBJ
 ‘Then on (her) flying away, he, putting earth on his head and crying,
 returned again to stay in the vizier’s house.’ (Tikkanen 1991: 374)

The sense of anteriority may, however, be canceled when the conjunctive participle expresses manner of action or an accompanying circumstance, in which case the conjunctive participle is often repeated.

- (38) *‘Aya máma já-ar takliṣ n-á-č-i-n nyóŋ-ko*
 father(ERG) mother(ERG) I-DAT trouble CP-1SG.IO-give-CP big-PL
u-yú-ar šwá n-e gar-íŋ ét-um-an.
 3HXPL.POSS-son(PL)-DAT good CP-do marriage-PL DO-ST-HPL.SUBJ
 ‘Father and mother arranged good marriages for their big sons,
 giving me a lot of trouble.’ (Tikkanen 1991: 481)
- (39) *Čáya n-ét-an n-ét-an (= é-č-um-e é-č-um-e) wazjir-e*
 story CP-DO-CP CP-DO-CP (DO-SS.CONV.SIM.) vizier-ERG
sén-im-i.
 say-ST-3MXYSG.SUBJ
 ‘Going on talking and talking, the vizier said.’ (Lorimer 1935, 1:
 section 370)

In the Yasin dialect, the conjunctive participle may occur with simultaneous value (yet retaining the aorist/punctual aspect) even when not used as a manner adjunct or complement, for example:

- (40) *Ne qhansamá jermaní čar d-é-yal gučá-m*
 that:M cook kettle sound D-3MX.Y.SG.SUBJ-hear(CP) sleep-ST
ba-m
 AUX-ST
 'The cook was sleeping, *when he heard* the sound of the kettle.'
 (Tiffou–Pesot 1989: 49, text 18.21)

Compared with the Dravidian, Tibeto-Burman, Altaic and modern Indo-Aryan conjunctive participles the Burushaski conjunctive participle seems, nevertheless, to be temporally somewhat more constrained (cf. Tikkanen 1987 a: 256–265, 299–309, 277–281).

8. Voice

The Burushaski converbs seem to be basically “active” forms. They contrast in this respect with the infinitives and participles, which are more neutral as to voice. This is reflected, for example, in periphrastic constructions with the copula: *girmin-um bilá* ‘it is written’ (aorist participle + copula) ≠ *?iné-e nu-kirmin bam* ‘he had written’ (conjunctive participle + copula).

Passive meaning (in the sense of “promoted patient and/or backgrounded agent”) has not been documented for Burushaski converbs, but it could be conceived as occurring e.g., with passive superordinate clauses. The absence of examples may be due to the relative scarcity of the passive as such (cf. Morin–Tiffou 1988). The following example is doubtful in this regard:

- (41) *Nu-úruč-a-n, qhošāamadiid n-e buṭ yaani hi-hín-e*
 CP-sit:PL.SUBJ-CP welcome CP-do much i.e. one-one-GEN
kāa uyám-kuṣ ét-um-an.
 with sweet-ness do-ST-HPL.SUBJ
 ‘On their having settled down there, they bid them welcome and everybody showed sweetness (i.e., hospitality) to each other.’
 ?‘Having settled down and been bid welcome, everybody showed sweetness to each other.’ (Tikkanen 1991: 48)

In the Indo-Aryan and Dravidian languages, the converbs are not infrequently used with a passive sense independently of the voice of the main clause (Tikkanen 1987 a: 132–140).

9. Semantic interpretations of converbal clauses

9.1. Semantic interpretations of specialized converbal clauses

The specialized converbs present no other problem than that of the normal pragmatic implicatures of cause for anteriority (or simultaneity) and purpose for posteriority. Some of the specialized converbs may also have a distinct secondary meaning or function. Thus two of the anterior different-subject converbs (*-um-ar/-as-ar*) are simultaneously same-subject final converbs [for infinitives], and some of the simultaneous same-subject converbs (*-č-um-aŋe*) are instrumental converbs. The correct interpretation rests on the lexical and textual context and to some extent on word order (final converbs tend to complement motion or volition predicates and may be postponed after the finite verb).

9.2. Semantic interpretations of conjunctive participle clauses

The conjunctive participle is capable of forming clauses that can be interpreted as either propositionally restrictive (\rightarrow temporal, causal, instrumental, descriptive or other kinds of circumstantial qualification) or propositionally nonrestrictive (and hence an additive-sequential relation). In the case of the former interpretation, it is “subordinatively” or “disjunctively” within the operational scope of the superordinate clause, and hence focusable. In the case of the latter interpretation, it is “coordinatively” or “conjunctly” within the operational scope of the superordinate clause, and hence not focusable (see sections 10–11). This distinction is not structurally encoded, and in (pragmatically) backgrounded clauses it may remain vague.

The propositionally restrictive reading is semantically less marked, because it is independent of the inherent aspect of the verb. On the other hand, if the verb is stative or denotes a mental process, the propositionally nonrestrictive (additive-sequential) interpretation is more or less precluded. The propositionally restrictive reading is also less marked pragmatically: given two juxtaposed propositions, a person would tend to look for some closer semantic relationship between them than mere “addition” or temporal sequence. However, different interpretations may be available for one and the same sentence (outside context) and the backgrounding of many conjunctive participles tends to cloud their semantic reading:

- (42) *Nu-sé é-s-ulo* *niyát n-e, hunc jaas*
 CP-say 3MSGPOSS-heart-INNESS decision CP-make arrow stretch
n-e, phat é-t-as-ar, *se*
 CP-do off 3MXYSG.DO-do-INF-DAT(=DS.CONV.ANT) that

húnc-an n-íi-n-in-in, Akbér baadšáa hín-áče
 arrow-SING CP-3MXYSG-(go)-CP Akbar king(GEN) door-ADESS
yá-m-i.
 hit-ST-3MXYSG.SUBJ

‘[Having decided in his heart (*temporal* CP)] [thus saying (*complemental* CP)], [on his letting the arrow go (*temporal* DS.CONV.ANT)], [having drawn it (*temporal* CP)], [that arrow went and (*additive-sequential* CP)] [hit King Akbar’s gate].’

≈ ‘Having decided this in his heart, he drew the arrow, and on letting it go, that arrow went and hit King Akbar’s gate.’ (Tikkanen 1991: 15)

The specialized (adverbial-type) converbs are by definition propositionally restrictive. But in modally unmarked sentences in narrative discourse, they may be used instead of finite verbs to express a mere sequence of action simply for the sake of textual cohesion (cf. example [42]).

The conjunctive participle may be used instead of coordinate or juxtaposed finite clauses in almost any temporal and modal context, but its basic restriction is subject coreference. This restriction is stronger with the additive-sequential reading than with the propositionally restrictive reading. If temporal sequence or contiguity of action is not emphasized, coordinate clauses may be preferred even when the subject is the same:

- (43) *Hí-hín-e búk-an-e man-úm-an,*
 one-one-GEN neck-SING-LOC become-ST-HPL.SUBJ (PRET)
bér-um-an.
 cry-ST-HPL.SUBJ(PRET)
 ‘They fell on each others’ necks [and] cried.’ (Tikkanen 1991: 471)

10. Scope integration and discourse-pragmatic function of converbs

A parameter that is often neglected in discussions of converbs and other dependent complex constructions is that of the system-specific variable scope of main clause operators, such as aspect, voice, deontic and epistemic modality, absolute tense, sentence mood/speech act and negation. This parameter is important for the understanding of the semantics as well as discourse function of converbs.

10.1. Subordinative and coordinative scope integration

The basic principle is that the operators of the main clause may or may not have scope over a finite or reduced dependent clause/phrase, depending on the type or "level" of the operators (cf. Foley–Van Valin 1984: 208–224) and the system-specific or typological constraints on "scope integration" of the finite or reduced subclause (cf. Tikkanen 1987 b: 410–414)

There are two types of 'scope integration':

1. The dependent clause can be "subordinatively" or "disjunctively" within the scope of the main clause like an integrated (nondetached) adverbial phrase. This implies that the outermost operators of question, time, negation, etc. may shift their focus from the main clause to the dependent clause/phrase (or to the interpropositional relationship). This allows the foregrounding or focusing of the dependent clause (which hence must be propositionally restrictive and noniterative) and backgrounding (or presupposition) of the main clause. This kind of "subordinative/disjunct scope integration" is found with finite adverbial subclauses, adpositional phrases and some "specialized" converbs of the adverbial (temporal or circumstantial) type. For example, *I drink tea after eating lunch, not before it/after eating dinner.*¹⁶
2. The dependent clause can be "coordinatively" or "conjunctly" within the scope of the main clause in the manner of an elliptical coordinated clause. The inner, less often outer operators then extend elliptically to the dependent clause,¹⁷ implying that the dependent clause cannot be foregrounded (nor backgrounded). The dependent clause must therefore not be propositionally restrictive or presupposed/given. In other words, the main clause and the dependent clause(s) share inner and (to a greater or lesser extent) outer operators and are on the same level of thematic and semantic hierarchy. This kind of "coordinative (conjunct) scope integration" may be found with finite dependent (i.e., elliptical)¹⁸ coordinated clauses and some copulative (-contextual) converbal clauses. For example, *I don't eat lunch and [I don't] drink tea.*¹⁹

The language- or system-specific constraints on the level of the operators involved in scope integration are revealed in modally, illocutionarily or temporally-aspectually marked contexts. The less integrated a converbal clause is in the scope of the superordinate clause, the less easily it can be foregrounded or operationally on a par with the superordinate clause in modally, illocutionarily and temporally-aspectually marked contexts. This helps explain why in most modern European languages converbs are mainly expressive of backgrounded/given information and/or confined to passages ranking low in discourse prominence.²⁰ (Backgrounding is also revealed in the generally low "transitivity" of converbal clauses, cf. Thompson 1983.)

The system-specific constraints on the scope integration of converbs correlate with the extent to which a converbal clause may replace a finite coordinate or subordinate clause independently of discourse type, pragmatic function and operational context, given that the language has both finite and nonfinite near-synonymous types of expression (Tikkanen 1987 b: 409–415). Thus, whereas a converb may implicitly share the aspect, modality and mood of the main clause, it need not be influenced by interrogation and negation.

These constraints are readily perceived in translation: nonbackgrounded converbs that are fully integrated in the scope of peripheral operators (such as absolute tense, modality, sentence mood, speech act and negation), can only be rendered by finite coordinate clauses, or, if focused or propositionally restrictive, subordinate clauses or adpositional phrases (rarely converbal clauses) in most (if not all) modern European languages. (In the literary style, these constraints may be somewhat relaxed.)

The following examples show that the Burushaski copulative-contextual converb shows lesser constraints on coordinative and subordinative scope integration than its English and Finnish counterparts (cf. also the examples given in notes 16 and 19).

- (44) *Je jímale d-áa-n ún-e káa duró*
 I tomorrow D-1SG.SUBJ-(come)-CP thou-GEN with work
é-č-a-m.
 do-DUR-1SG.SUBJ-ST
 a. 'I will come tomorrow and work with you.' (T A3 a)
 ≠ ?*'Coming/Having come* tomorrow, I will work with you.'
 ≠ 'Tultuani huomenna työskentele kanssasi.' (Finnish)
 b. 'I will work with you, after I have come (/after coming) tomorrow.'
 = ?'I will work with you, *having come* tomorrow.'
 = 'Tulen työskentelemään kanssasi *saavuttuani* huomenna.' (Finnish)
- (45) *'Un-e jímale du-kóo-n já-a káa duró*
 thou-ERG tomorrow D-2SG.SUBJ-(come)-CP I-GEN with work
é-č-um-a-a?
 do-DUR-ST-2SG.SUBJ-Q
 a. 'Will you come tomorrow and work with me?' (cf. T A3 a)
 ≠ ?*'Coming/Having come* tomorrow, will you work with me?
 ≠ *Saavuttuasi* huomenna tuletko työskentelemään kanssani?
 (Finnish)
 b. 'Will you work with me, after you have come (/after coming) tomorrow?'

- = ?Will you work with me, *having* come tomorrow?
 = Tuletko työskentelemään kanssani *saavuttuasi* huomenna?
 (Finnish)

To the extent that subordinative scope integration in converbal clauses in European languages is more common than coordinative scope integration, finite subordinate clauses are more easily rendered converbal than finite coordinate clauses.

But in languages that have formal or semantic constraints on the coordination of finite verb phrases or clauses (such as Japanese, Dravidian and, to a lesser extent, Turkic and Burushaski), the situation may be reversed, or there may be different types of converbs with regard to subordinative vs. coordinative scope integration. Subordinative scope integration may then be found especially with specialized converbs of the “adverbial” (propositionally restrictive) type, while coordinative scope integration is found with copulative(-contextual) converbs.

Languages that exhibit no such restrictions on finiteness may nevertheless gradually develop more or less fully scope-integrated converbs, owing, for instance, to stylistic demands (compactness or fluency) or areal pressure, as has been the case in Indo-Aryan. The Indo-Aryan conjunctive participle could, to begin with in early Vedic, share only aspect, tense and mood with the main clause, but in later Vedic and Classical and Epic Sanskrit it is found to share interrogation, and in late Middle and New Indo-Aryan also negation with the main clause (Tikkanen 1987 a: 160–163, 263–265).²¹

It should also be pointed out that the focusability of converbal clauses depends just as much on scope integration as on the specificity (or formal encoding) of the semantic interpropositional relationship expressed by the converbal clause. The Burushaski and Hindi-Urdu conjunctive participles are equally vague from the semantic point of view, and yet the former can be focused (see section 11).

10.2. Scope of aspect, tense, mood and interrogation

Unless the converbal clause is backgrounded or propositionally restrictive, it is (coordinatively) within the aspectual, temporal and modal-illocutionary scope of the main clause. This implies that if the main clause expresses an assertion, injunction or question, so does the (nonrestrictive or nonbackgrounded) conjunctive participle clause. But since the parameter of interpropositional restrictiveness is poorly encoded in the structure, many conjunctive participle clauses are ambiguous in isolation, cf. examples (42) and (44)–(45). For example:

- (46) *Amúman kból-ar du-kóo-n(-in) sí-ç-um-e*
 usually here-DAT D-2SG.SUBJ(-come)-CP(-CP) eat-SS.CONV.SIM
burúť!
 sit/stay(IMPV)
 'Come here often and eat!' (T A14)
- (47) *Má-a gútaš-o d-ú-ču-n já-a diš-ulo bése*
 you-ERG corpse:PLUR D-3HPL.DO-bring-CP I-GEN place-INNESS why
yáar-e ó-č-á-an?
 down-LOC 3HPL.DO-do(DUR)-AUX-HPL.SUBJ
 a. 'Why do you bring your corpses and bury them on my land?'
 b. 'Why do you bury your corpses on my land, after bringing them?'
 (Lorimer 1935, 2: 112, l. 18–19)
- (48) *Iné ún-e há-al-ar d-ú-n-in hamúšá*
 (s)he thou-GEN house-ILL D-3MXYSG.SUBJ(-come)-CP-CP always
akbil-aṭe yarí-ç-um-e
 such-SUP speak-DUR-ST-LOC(=SS.CONV.SIM)
burú-š-á-i-a?
 sit/stay-DUR-AUX-3MSG.SUBJ-Q
 a. 'Does he always come to your house and speak in this way?'
 b. 'Does he always speak in this way after coming to you house? (T A18)

The latter, propositionally restrictive reading with the conjunctive participle pre-supposed and subordinatively within the scope of the main clause is, in fact, better expressed by a finite temporal clause or a temporal participial clause:

- (49) *Béšal béšal in má-a há-ale*
 when when (s)he you-GEN house-LOC
d-ú-m-i (ke), ...
 D-3MXYSG.SUBJ(-come)-ST-3MXYSG.SUBJ (ever)
 'Whenever he comes into your house, [does he always speak like this?]
- (50) *Má-a há-ale d-ú-m waqt-ulo ...*
 you-GEN house-LOC D-3MXYSG.SUBJ(-come)-ST time-INNESS
 'At the time of his coming to your house, [does he always speak like this?]' (T A18 a)

There is, nevertheless, an idiosyncratic restriction on the scope of absolute tense: if the time reference switches explicitly from past to present or future, a finite

coordinated clause is preferred (switch from present to future reference is tolerated).

- (51) *Sabuúr in-e gáne já-a qhat*
 yesterday (s)he-GEN for I-ERG letter
*girmín-a bá-ya-m/*ni-kírmin-in* *kehuulto/jímale*
 write-1SG.SUBJ AUX-1SG.SUBJ-ST/*CP-write-CP today/tomorrow
é-er óocu-č-a-m.
 3MXYSG-DAT send-DUR-1SG.SUBJ-ST
 'Yesterday I wrote a letter to him and today I will send it to him.'
 (T A3)

Compare the switch from present to future:

- (52) *Khuulto je in-ar qbat-an girmi-y-a-m/ni-kírmin*
 today I he-DAT letter-SING write-DUR-1SG.SUBJ-ST/CP-write
jímale é-er óocu-č-a-m.
 tomorrow 3MXYSG-DAT send-DUR-1SG.SUBJ-ST
 'Today I will write a letter to him and tomorrow I will send it to him.' (T A4)

This restriction, which runs counter to Foley and Van Valin's (1984: 234) formal definition of operational levels according to the theory of the layered structure of the clause, is paralleled in Hindu-Urdu (cf. Davison 1981, 1986).

10.3. Scope of negation

As regards the outermost operator of negation, the situation is more complicated and the responses were curiously divided. In fact, I could sense the influence of Urdu in many responses. Negation is expressed in Burushaski in the finite and nonfinite verb by means of a negative prefix (*a-'*, *oó-*),²² but its scope may extend over any propositionally restrictive dependent (finite or nonfinite) clause, in which case the governing clause becomes presupposed and hence affirmed rather than negated (switch of negation focus).

The question is, can main clause negation extend elliptically (coordinatively) over a converbal clause, as is possible in Dravidian, modern Indo-Aryan (cf. Tikkänen 1987 a: 300, 264–265), modern Turkish (*-(°)p*) and possibly other Turkic languages, but not Old Turkish (Schulz 1978: 128–175) and Mongolian (Juha Janhunen, personal communication)? At least one example is found in Lorimer's texts. Here the conjunctive participle (*dúsin* < *d-'us-* 'take out') shares the negation of a superordinate negated anterior converb (*dak ayétumaṭe* < *dak -t-* 'hammer on something'):

- (53) *Já-a hik ke gusée-çe şũũ-ul-um d-i-us-in*
 I-ERG on(c)e even it:X-ADESS forge-ELAT D-3MXYSG.DO-take out-CP
ðak ay-é-t-um-açe,
 hammering NEG-3MXYSG.DO-do-PTCP-SUP(SS.CONV.ANT.NEG),
i-khár-açe d-i-man-im-i.
 3MXYSG.POSS-self-INSTR D-3MXYSG.SUBJ-become-ST-3MXYSG.SUBJ
 'Without my even once taking it out from the forge and hammering
 it, it came into existence of itself.' (Lorimer 1935, 2: 162, l. 7–8)

The negated anterior converb is used here to express contrastive negation, since the main clause is positive.

I was able to elicit some further examples of the conjunctive participle clause being coordinatively within the scope of main clause negation, but since a conjunctive participle clause can always be interpreted as being propositionally restrictive, such sentences can receive at least three distinct readings according to the variability of the scope of negation: (a) only the main clause is negated; (b) the whole sentence is negated as a single (complex) proposition; (c) the main clause and conjunctive participle clause are negated as two propositions:

- (54) *Khúruman sis majít-ar n-úu-n-in nimáaž*
 some people mosque-DAT CP-3HXPL.SUBJ-(go)-CP-CP prayer
ay-é-č-a-an.
 NEG-do-DUR-AUX-HPL.SUBJ
- 'Some people do not pray, having gone to the mosque [, but read].'
 = 'Having gone to the mosque, some people do not pray.'
 [[...CP]...VP^{NEG}]
 - 'Some people do not pray after going to the mosque [, but after shaving].'
 [[...CP]...VP^{NEG}]
 - 'Some people do not go to the mosque and [do not] pray.'
 [...CP^(NEG)...VP^{NEG}] (T A5 a)

According to one judicious 22-year-old informant (Ghulam Murtaza), the third reading with the conjunctive participle negated in coordination with the head clause would in this particular sentence require the negated anterior converb, *oó-ni-m* 'not having gone'. A similar restriction was expressed for (55) by all other informants as well (cf. examples [55] and [56]):

- (55) *Khúulto je han qhát-an ni-kírmin jímale*
 today I one letter-SING CP-write tomorrow
ay-óóču-č-a-m.
 NEG-send-DUR-1SG.SUBJ-ST

- a. 'I will write a letter today, but I will not send it tomorrow.'
 *b. 'I will not write a letter today and send it tomorrow.' (T A5)

- (56) *Khúulto je han qhát-an a-kírmin-um*
 today I one letter-SING NEG-write-PTCP(=NEG.CONV.ANT)
jímale ay-óócu-č-a-m.
 tomorrow NEG-send-DUR-1SG.SUBJ-ST
 'I will not write a letter today and send it tomorrow.' (T A5)

Of course, pragmatic considerations (informational weight, discourse prominence, maxims of conversation, etc.) have to be taken into account when judging the probability of coordinate scope integration, as for example, in the following two-part question:

- (57) 'Un-e čái n-ét-an ité-er bayú
 thou-ERG tea CP-do-CP it:Y-DAT rock salt
e-é-waš-č-á-a?
 NEG-3MXYSG.DO-throw-DUR-AUX-2SG.SUBJ
 a. 'After making tea, do you not put rock salt in it?'
 *b. 'Do you not make tea and put rock salt in it?' (T A5)

On the other hand, the ambiguity of sentences like the following were acknowledged, because of the marked mood (injunction) or expectation involved:

- (58) *Bayú n-ét-an-in čái oó-min!*
 rock salt CP-make-CP-CP tea NEG-drink(IMPV)
 a. 'Do not drink the tea after putting rock salt into it!'
 ??b. 'Do not put rock salt into the tea and drink it!' [One does not generally prepare one's tea by putting rock salt into it and then just leave it.] (T A27)
- (59) *In kból-ar d-ú-n-in ín-e kbóle*
 (s)he here-DAT D-3MXYSG.SUBJ-(come)-CP-CP (s)he-ERG here
šapík e-é-š-č-á-m.
 bread NEG-3MXYSG.DO-eat-DUR-AUX-ST
 a. 'He did not come here and eat bread.'
 b. 'He did not eat bread here after coming here.' (T A20)

If the first clause is to be unambiguously negated, two finite negative coordinate clauses must be used (cf. examples [60], [62] and [64]):

- (60) *In kból-ar a-čú-č-á-m dáa ín-e kbóle*
 (s)he here-DAT NEG-come-DUR-AUX-ST and (s)he-ERG here
šapík e-é-š-č-á-m.
 bread NEG-3MXYSG.DO-eat-DUR-AUX-ST
 'He did not come here and eat bread.'

- (61) *Je d-áa-n-in* *ʃapík* *ʃi-ʃ*
 I D-1SG.SUBJ-(come)-CP-CP bread(x) eat(x.DO)-SINF
ay-áa-ma-y-a *bá-a.*
 NEG-1SG.SUBJ-be able-DUR-1SG.SUBJ AUX-1/2SG.SUBJ
 a. 'I cannot eat bread, after coming.'
 b. 'I cannot come and eat bread.' (T A15)
- (62) *Je ju-ʃ* *ay-áa-ma-y-a* *bá-a*
 I come-SINF NEG-1SG.SUBJ-be able-DUR-1SG.SUBJ AUX-1/2SG.SUBJ
dáa ʃapík ʃi-ʃ ay-áa-ma-y-a
 and bread eat-SINF NEG-1SG.SUBJ-be-able-DUR-1SG.SUBJ
bá-a.
 AUX-1/2SG.SUBJ
 'I cannot come and eat bread.' (T A15)
- (63) *Un hásb-e* *dastúur kból-ar* *du-kóo-n*
 thou accordance-IZAFET practice here-DAT CP-2SG.SUBJ-(come)-CP
já-a dándó oó-ʃi!
 I-GEN meat-gruel NEG-eat(Y)(IMPV)
 a. 'Do not make a practice of coming here and eating my meat-gruel!'
 b. 'Do not make a practice of eating my meat-gruel after coming here!'
 (T A17 a):
- (64) *Un hásb-e* *dastúur kból-ar a-čú* *dáa*
 thou accordance-IZAFET practice here-DAT NEG-come(IMPV) and
já-a dándó oó-ʃi!
 I-GEN meat-gruel NEG-eat(Y)(IMPV)
 'Do not habitually come here and eat my meat-gruel' (T A17 a)

11. Focusability and discourse function of converbs

The discourse function of converbs varies according to the parameters of scope integration and focusability. The greater the system-specific constraints on these parameters in converbs are, the more constrained to a mainly backgrounding or stylistically marked function they will be (cf. section 10).

Like the Dravidian and modern Indo-Aryan conjunctive participles, the Burushaski conjunctive participle may share any operator of the main clause, although we saw that there is still some uncertainty about shared negation. On the other hand, the Hindi-Urdu conjunctive participle cannot be focused on its interpropositional relation to the main clause. This suggests that it is not fully integrated

within the sentence structure (cf. Davison 1981, 1986). The Burushaski conjunctive participle shows no such constraint when propositionally restrictive.²³

- (65) *In(-e) čái-ulo bayú n-ét-an-in, mim-ış*
 (s)he(-ERG) tea-INESS salt CP-do-CP-CP drink-SINF
ay-ée-ma-i bá-i.
 NEG-3MXYSG.SUBJ-be able-DUR AUX-3MSG.SUBJ
 'He cannot drink tea after putting rock salt into it.'
 'He cannot put rock salt into the tea and drink it.' (T A22 a)
- (66) *Je (?já-a) čái ét-as-ul-o bayú wáš-č-a*
 I (I-ERG) tea make-INF-INESS rock salt throw-DUR-1SG.SUBJ
bá-a, čái n-ét-an-in
 AUX 1/2SG.SUBJ tea CP-make-CP-CP
e-é-wáš-č-a bá-a.
 NEG-3MXYSG.DO-throw-DUR-1SG.SUBJ AUX-1/2SG.SUBJ
 'I put rock salt into the tea while making it, I do not put it after making tea.' (T A23)
- (67) *Běšal ún(-e) čái mi-i bá-a?*
 when thou(-ERG) tea drink-DUR AUX-1/2SG.SUBJ
Je bayú n-ét-an-in mi-i-ya-m.
 I rock salt CP-do-CP-CP drink-DUR-1SG.SUBJ-ST
 – 'When do you drink [your] tea?'
 – 'I'll drink it, after putting rock salt into it.' (T A28)
- (68) *Šákar-čái nu-mín/min-áas-čum in yaliis*
 sugar-tea CP-drink/drink-INF-ABL(=CONV.CAUS) (s)he sick
e-é-man-á-m, bálkei bayú čái nu-mín-in
 NEG-3MXYSG.SUBJ-become-AUX-ST but rock salt tea CP-drink-CP
yaliis i-mán-im-i.
 sick 3MXYSG.SUBJ-become-ST-3MXYSG.SUBJ
 'He did not get ill after drinking sugar tea, but after drinking rock salt tea.' (T A29 a)

On the other hand, any converbal clause may be presupposed or contextually given and hence backgrounded. In narrative and procedural discourse, the finite verb with its complement(s) is, in fact, often repeated in conjunctive participle form at the beginning of the following sentence if the subject remains the same. If the subject changes, a different-subject converb is selected (but cf. also sections 6.1–2):

- (69) *Ué d-ó-sqalt baaleýi, juwáay-o*
 they D-3HXPL.SUBJ-arrive(CP) puberty youth:PL
u-mán-um-an. Juwáay-o n-ú-man.
 3HXPL.SUBJ-become-ST-3HPL.SUBJ youth:PL CP-3HXPL.SUBJ-become
wáqt-an-čum ué yú-e
 time-SING-ABL those (3MXYSG.POSS-)sons-ERG
ú-ny-ar sén-um-an ...
 3HXPL.POSS-father-DAT say-ST-3HPL.SUBJ
 'They attained puberty and became adolescent. Having become adolescent, after some time, those sons said to their father ...' (Tikkanen 1991: 3–4)
- (70) *Gar ét-as awaáji, sén-um-ar, but*
 marriage make-INF need say-PTCP-DAT(=DS.CONV.ANT) very
šúa, yú-ar nu-sén, téelum ín-e wazîr-ar
 good (3MXYSG.POSS-)sons-DAT CP-say then he-ERG vizier-DAT
qáo ét-im-i.
 call make-ST-3MXYSG.SUBJ
 'Upon [their] saying: "It is necessary for us to marry", [the King said] to his sons: "Very good!", and then he called the vizier.' (Tikkanen 1991: 7)

There are no focus particles in Burushaski other than the inclusive and indefinite particle *ke* 'too, also, even, -ever; and; if, when' and the emphatic indefinite particle *kúli* 'even, (-)ever'. The conjunctive participle cannot be combined with these particles in their indefinitizing or focusing functions (but cf. example [13], where *ke* is used as a clause-final conjunction, 'when').

12. Coordination of converbs with other constituents

Converbs cannot be coordinated with finite verb forms in the same clause, but a converbal clause and finite clause can occasionally be coordinated (cf. example [14]). Same-subject converbs form iteratively recursive structures under the propositionally nonrestrictive reading (cf. example [38]). Different-subject converbs form clauses that can be juxtaposed to same- or open-subject converbal clauses (cf. example [42]).

13. Complex converbal clauses

A converbal clause may be dependent on another converbal clause (of different type, cf. example [53]) and it may itself govern a relative participle or infinitive, for example:

- (71) *Iskí-ulum i-i-e yúrqu-n-e ámi-s*
 three-ORD 3MXYSG.POSS-son-ERG frog-ERG which-XSG
d-i-mai šuqá yu-ú
 D-3MXYSG.DO-fold(CP) cloak(x) 3MXYSG.IO-give(x)
b-i-m ke, isé yu-ú-m
 AUX-3XSG.SUBJ-ST(PRET) -ever that(x) 3MXYSG.IO-give(x)-PTCP
isé čoyá n-i-ču-n, baadšaa
 that:X cloak CP-3MXYSG.DO-bring-CP king
ée-ul-as-ar, iné darbáar
 3MXYSG.CAUSEE-dress-INF.DAT(=DS.CONV.ANT) (s)he court
i-i han čoyá yu-úŋis-čum
 3MXYSG-self one cloak 3MXYSG.POSS-foot-ABL
i-yáŋis-čar phit, baraabár,
 3MXYSG.POSS-head-ALL fit suitable
d-ú-m-i.

D-3MXYSG.SUBJ-(come)-ST-3MXYSG.SUBJ

‘When the third son brought and made the King put the cloak on, which the frog had folded and given, the cloak given by it [i. e., the frog], it fitted, suited, him from foot to head, [like] one of his own court cloak[s].’

(lit. ‘When the third son, the cloak which the frog had folded and given him, having brought it, given by the frog, on his making the King put it on, it fitted, suited, him from foot to head, [like] one of his own court cloak[s].’) (Tikkanen 1991: 278)

I have not found any example of self-embedding (i. e., cyclic recursion) of identical converbs. If self-embedding is required, different synonymous converbs are used (cf. example [42]).

14. Diachrony of Burushaski converbs

Burushaski has only one ‘primary’, i. e., morphologically nonderived converb, the conjunctive participle. Etymologically speaking, this is simply the finite verb in its least marked form (conative/aorist) elliptically stripped of its subject suf-

fix/infix (redundant owing to the same-subject constraint) and preceded by a quasi-conjunctive element *n[V]-* (possibly connected with the demonstrative-anaphoric pronominal stem *in-* '(s)he'), optionally repeated at the end of the verb. Since the conjunctive participle cannot be negated, it may be surmised that its original function was backgrounding or additive-sequential rather than emphatically propositionally restrictive ("adverbial" in the temporal or circumstantial sense).

All the other converbs are derived from participles or infinitives. It may hence be speculated that there was once a period in pre-Burushaski when the conjunctive participle was the only converb. This must have been followed by the (monofunctional) simultaneous same-subject converb, the negated anterior same-subject converb, and the anterior different-subject converb(s).

15. Areal-typological implications of Burushaski clause-linking strategies

Burushaski has an indigenous inclusive particle *than* which can also be used as a phrasal coordinating or clause-final subordinating conjunction: *ke* (Yasin: *ka*) 'too, even, -ever'; 'and'; 'if, when'. It is used as a coordinating conjunction mainly between noun phrases. At the clause level, it tends to imply subordination (conditional or temporal) rather than coordination. Coordination of verbs, verb phrases or full clauses is mainly asyndetic.

A more emphatic coordinative conjunction is the adverb *dāa* 'again, then, more(over), and (so)'. Lately, some clause-initial subordinating conjunctions have developed or been borrowed, but converbal and infinitival clauses are still the most common and unrestricted means of combining several predications in one and the same sentence.

The morphological structure of the Burushaski conjunctive participle is not reminiscent of any other South or (adjacent) Central Asian language, where converbs are either bare or extended tense/aspect stems (Dravidian, South Munda, Turkic, Persian-Tajik, Pashto) and/or instrumental, ablative or locative verbal nouns/infinitive-participles (Indo-Aryan, Nuristani, † Tocharian, † Khotanese Saka [?], Tibeto-Burman, North Munda, Turkic), more seldom semifinite forms combined with an (enclitic) particle or conjunction (Tibeto-Burman, South Munda partly). (Compare Tikkanen 1987 a: 265–281, 299–317.)

There are no indications whatsoever that the Burushaski conjunctive participle is a recent, areally conditioned development. On the contrary, it is areally somewhat aberrant in that it is formed by adding an opaque prefix (or circumfix)

to the verb and in that it lacks the secondary use in so called “explicator compounds” or “subjective aspects” so common in South and Central Asia (with the further exceptions of Pamir Iranian and Pashto).²⁴ Moreover, it can be focused but not negated, although it should be noted that similar suppletive negation of conjunctive participles is attested also in Central Asian Turkic and South Asian Dravidian. Incidentally, these are precisely the South/Central Asian language groups where conjunctive participles can be reconstructed to the proto-stages, but the loss of the negated converb in $-(^o)p$ is secondary in Turkic (Juldašev 1977: 64).

Apart from the Urdu-inspired increasing use of Burushaski conjunctive participles sharing negation with the superordinate clause, I have found no other clear indications of external influence on Burushaski converbs. This may, however, only be because I have not yet studied the Shina and Khowar converbs in the field and the available data on Shina and Khowar are rather scarce. Annette Fremont (1989) has suggested that the variable use of the conjunctive participle in conjoining or concatenating sentences (e.g., ... *nimi. Nīn* ... ‘... went. Having gone, ...’) in narrative and procedural discourse in Hunza and Nager Burushaski could reflect Domaakí influence, which is absent in Yasin.

Copulative-contextual conjunctive participles constitute a widespread South and Central Asian areal linguistic feature, missing only in Pamir Iranian, Brahui (Northwest Dravidian), two South Munda languages, and some Tibeto-Burman and Austroasiatic languages of Assam. Copulative-contextual conjunctive participles are not indigenous to Indo-European, Sino-Tibetan and Munda/Austroasiatic, being an ancient innovation in Indo-Aryan (pre-Vedic) and Tibeto-Burman, and a somewhat less ancient innovation in Central/South Asian Iranian (Nuristani, † Khotanese Saka [?], Pashto, Tajik, Persian), † Tocharian (A and B), and Munda, excluding, as it seems, only Juang and Pareng of South Munda. (Compare Tikkänen 1987 a: 265–274, 277–281, 299–317) Simultaneous converbs, on the other hand, are areally less confined, being spread almost all over Europe, North Africa (cf. the Arabic accusative infinitive in adverbial *ḥāl*-clauses; Trumpp 1876) and the greater part of Asia.

In Eurasia converbs as such seem to be missing only in those languages that lack specifically nonfinite forms or make no adverbial use of them (e.g., Pamir Iranian, Chinese, and most Southeast Asian languages, except at least Indonesian, which may prefix *se-* ‘one, all, same’ to the verb stem to form a simultaneous same-subject converb).²⁵ This distribution of converbs is obviously connected with restrictions on finiteness: languages that exhibit formal or semantic constraints on the coordination of finite verb phrases or clauses tend to develop copulative(-contextual) and temporal or adverbial converbs. Languages that

show lesser constraints on finiteness, tend to acquire converbs mainly to express backgrounded simultaneous or preceding circumstances (but cf. Classical Greek, note 20).

On the other hand, no language is pure in type and the restrictions on finiteness and operational integration are seldom absolute or stable over time. In the Indo-Aryan languages, it may be noted that the use and operational integration of converbs have increased ever since the early Vedic period, although there are still no structural constraints on finiteness comparable to those of Dravidian (cf. Steever 1988). Nevertheless, there has been convergence between these languages as shown in the gradual loosening of the constraints on coreferentiality, relative past temporal value and operational integration of the Indo-Aryan conjunctive participle. Also the building up of a new system of converbs in Indo-Aryan (e.g., the conditional-temporal converb in Bengali and Oriya) might suggest Dravidian sub- and adstratum influence.

Since there are no pre-Aryan Dravidian loanwords in Burushaski, it is unlikely that Burushaski and Dravidian were ever in direct contact. (The same can be said about Burushaski and Austroasiatic.) Nevertheless, Dravidian and Burushaski show the same basic word order type and preference for converbs versus finite complex structures. On the other hand, from the point of view of its morphological type Dravidian agrees more with Turkic or even Uralic in using (almost) only suffixes, while Burushaski agrees (somewhat) more with Tibeto-Burman (and Austroasiatic) in using both prefixes and suffixes. A further typological point shared with West Tibeto-Burman is the ergative construction. A rather similar areo-typological constellation can be observed in phonology. All the said languages except Turkic have retroflex consonant phonemes, but the Dravidian system differs fundamentally from the Burushaski and Tibeto-Burman systems, while the (noninherited) Proto-Indo-Aryan system is a kind of compromise between Dravidian and Burushaski (Tikkanen 1987 a: 284–299).

One of the conclusions that can be drawn from these typological comparisons is that the whole region lying between Burushaski and (ancient) Dravidian was probably always occupied by (now extinct) languages that were of the same general syntactic type, i. e., exhibited consistent head-final word order characteristics and a preference for converbs versus finite complex structures. In addition, they must have possessed retroflex consonants. These features are original in Burushaski and Dravidian, but (to a large extent) areally inherited or secondary in Indo-Aryan, Western Tibeto-Burman and Munda (Austroasiatic).²⁶

Abbreviations

1/2/3	affix of 1st/2nd/3rd person	ILL	illative (= inessive + dative)
ABL(-COM)	ablative(-comitative)	IMPV	imperative
ABS	absolute	INESS	inessive
ACC	accusative	INF	infinitive (+ habitual participle-agent noun)
ACT	active		
ADESS	adessive	INSTR	instrumental
ADJ	adjectival formative	INTR	intransitive
ALL	allative	IO	indirect object
AUX	auxiliary (in tense formation)	LOC	(plain) locative (= ergative = genitive)
BEN	beneficiary		
CAUS	causal/causative	M	masculine
COMP	complement(izer)	NEG	negative
CON	conative (Yasini: aorist I)	NEUT	neuter
COND	conditional	OBL	oblique
CONV	converb (adverbial participle/gerund)	OPT	optative
COP	copula	ORD	ordinal
CP	conjunctive participle = anterior same-subject	OS	open-subject
	converb	PERF	perfect
DAT	dative	PL	plural
DS	different-subject	POSS	possessive
D	verbal prefix <i>d(V)</i> : process/destination-orientation/intransitive (logical) direct object	PR	present (in PR.PTCP = SS.CONV.SIM = genitiveof durative stem)
DO	(logical) direct object	PRET	preterite
DUR	durative	PRN.PR	pronominal prefix
ELAT	elative	PTCP	[aorist] participle
ERG	ergative (= genitive, except in feminine singular)	REC	recipient
EXCL	exclusive	Q	question marker
EXP	experienter	S	sentence/clause
F	feminine	SG	singular
FUT	future	SIM	simultaneous
GEN	genitive	SINF	supine-infinitive
H	human	SING	singulative
		SS	same-subject

ST	static participle (used in tense formation, e.g., verb stem + ST = PRET)	SUP-DAT	dative of superessive = supralative
SU(BJ)	subject(-agent)	TR/C	transitive-causative
SUP	superessive = superessive + locative)	x	x gender/class
		y	y gender/class
		ys.	Yasin dialect

Notes

1. This article is largely based on data collected by the author in Hunza and Nager during the summer of 1989 on a research trip sponsored by the Nordic Institute of Asian Studies and the Academy of Finland. Of my many informants, I would here like to thank especially Qalandar Qhan (story-teller), Ata Ullah Beg, Musa Beg, Yar Imam Beg, and Qhisro Qhan from the Baltit region and Ghulam Murtaza from Atabad. Sincere thanks are also due to Hermann Berger, Juha Janhunen, Martin Haspelmath, Bernard Comrie, Kazuto Matsumura and Peter Edwin Hook for having read and presented various helpful comments on earlier versions of this article. For the remaining flaws I can blame only myself.

Abbreviations of data sources: T A and T B are used to indicate the author's field notes.

2. The system of transcription employed follows the principles established by Hermann Berger (1974, n. d.). The graphemes used in the phonemic transcription are: *a i u e o ~*; *p ph (f) b m n, t th d n s z ç çh r l, t th d s j ç çh y, ç çh j ç y, k kh g ŋ, q qh/x γ, b*. Retroflexes are marked by subscript dots (except *y*, which is mostly dorso-palatal rather than retroflex), dental affricates by superscript dots, palatals by haček (except *j = ĵ*; Berger marks all palatals by single acute accents: *č*, etc.), aspirates are written as digraphs *ph* (etc.), high tone on a long vowel *āa* (etc.), low-rising tone *āa* (etc.). Burushaski has a distinctive shifting accent, but monosyllables are for convenience left unaccented in transcription.
3. Hunza and Nager display "split ergativity" in the pronoun, i. e., the first person and sometimes also the second person take the absolutive with transitive verbs in the future tense and nonindicative moods (Tiffou 1977; Tiffou-Morin 1982).
4. Burushaski has four genders/noun classes, conventionally abbreviated: (h)m, (h)f, x and y. Class y refers typically to (relatively) formless or uncountable entities, x to (relatively) clear-shaped entities except human beings, (h)m to human masculines and (h)f to human or supernatural females.
5. Some common verbs have different "allomorphs" according to the class and number of the direct object or intransitive subject, e.g., "to give": *-čhi-* ysg, *-yūn-* ypl, *-ū-* hx object. When coordinated, such verbs may have to be repeated suppletively with each direct object or subject in agreement with its class and number, e.g. *jamé i-čhi-m-a, hūnč yu-ū-m-a* 'you gave him a bow [y] and you gave him an arrow [x]'. This can be avoided by using "subordination" ("A with B") rather than coordination ("A and B") of class/number-conflicting objects or subjects. Hence we have *jamé-e káa hūnč yu-ū-m-a* 'you gave (x) him an arrow (x) with the bow (y)', rather than *??jamé ke hūnč yu-ū-m-a* 'you gave (x) him the bow (x) and an arrow (y)'. Note also that if the verb has an "indirect object" or beneficiary, the pronominal prefix tends to refer to that argument rather than the "direct object".
6. In the first person singular the subject suffix is placed immediately after the verb stem and before other suffixes, i. e., as a quasiinfix.

7. Somewhat like Early Indo-European, Burushaski has a three-way system of vowel gradation in partial connection with a shifting distinctive stress accent, the position of which is determined according to sandhi rules of accented vs. nonaccented affixes and stems/roots. Hence, pronominal prefixes and some monosyllabic roots have three or four varying grades of their vowels. The given grade may be weakened by the shift of accent to a prefix (cf. example [8]). In verb forms consonants also alter: a prefix or root starting with a voiced ([–tense]) stop/affricate/*w* is unvoiced (> [+tense]), if immediately preceded by a vowel or the causative prefix *-s-*, e.g., *nu-kú-ic* ‘having seen you (conjunctive participle)’ for ***nu-gu-yeéc* < *-yeéc-* ‘to see’.
8. This semiopaque, weakly productive formative has been analyzed by Bashir (1985). It seems to stress the process, its result, recipient or point of destination rather than the action, the actor or point of origin. It is hence frequently used to derive intransitives or intransitive denominatives.
9. The chief simplification here is that the element AUX takes its own personal endings and formatives, which vary according to tense. The accent is on the first accented prefix or the first syllable after an unaccented prefix, unless the root is unaccented and lacks a prefix, in which case the accent follows the root.
10. It may come as a surprise that the first *n* in this set of forms (anterior same-subject converb: conjunctive participle is not part of the root *ni-* ‘to go’, but the prefix of the conjunctive participle. Equally surprising it may be that even the following *i(i)* does not belong to the root, but is the pronominal prefix for 3mxyg (cf. *n-áa-n* ‘I having gone’, *nu-kóo-n* ‘you (singular) having gone’, *na-máa-n* ‘you having gone’, etc.). But perhaps most surprising is the fact that even the final *n* does not belong to the root, but is the suffix of the conjunctive participle. In other words, there is no trace of the root itself in the conjunctive participle paradigm of this verb. Compare also, e.g., *n-ó(-t-an)* ‘having made them’ (< *-t-* ‘to make, do’), etc., as against *n-óo(-t-an)* ‘having caused them to make’ (< *-t-* ‘to cause to make, do’), etc.
11. The participles, which also occur in many (contracted) periphrastic tense forms, may be nominalized and declined, functioning, for example as (secondary) converbs. In Yasin they are also used as infinitives. To avoid confusion, I abbreviate the participle “st” (“static participle”, Lormer) when it occurs in (contracted) periphrastic tenses.
12. I use the terms “copulative” and “additive-sequential” (“V₁ and then V₂”) instead of Nedjalkov’s (in this volume) “coordinative” (basically a syntactic concept) and “narrative” (a type of discourse). A tale or report (containing predominantly narrative discourse as characterized by accomplished time, chronological linkage and neutral mood) may contain passages of any other type of discourse, just as a sermon (predominantly hortatory), computer manual (predominantly procedural) or scientific essay (predominantly expository) may also contain, for example, narrative discourse (for the definitions of basic discourse types, see Longacre 1976: 200). A true copulative(-contextual) converb is able to express the additive-sequential relationship regardless of discourse type, speech act and tense, cf. Sanskrit:

- (i) *Satvaram ga-tvā mām darś-ay-a!* [Hitopadeśa 2.10]
 hastily go-CP 1:ACC see-CAUS-THME(2.SG.ACT.IMPV)
 ‘Go immediately and show me!’ ≠ ‘Going/having gone immediately, show me!’

“Contextual” converbs, on the other hand, express various adverbial meanings. The combination of both copulative and contextual functions in one and the same converb is common in South and Central Asia, e.g., in Indo-Aryan, Burushaski, Dravidian, Turkic, etc. (cf. Juldašev 1977: 27; see also Nedjalkov in this volume).

13. The conjunctive participle is formed by a circumfix, consisting of an obligatory prefixed morpheme (*n[V]-*) and a more or less optional suffixed morpheme (*-(i)n*). The prefix is not, however, used with verbs commencing with the verbal *d*-prefix and the suffix is mainly confined

to verbs ending in a vowel. The binding vowel of the prefix is *u* or *i* (if the first root vowel is *i*). But when the root is preceded by a pronominal prefix, the timbre of the vowel of the latter determines the binding vowel, e.g., *na-má-ya(n[-in])* 'having taken you [pl]' < *-yán-* 'to take (hx DO)'. A root-final *-n*, *-y* or *-t/ʃ* may be dropped in the conjunctive participle, unless protected by the recursive suffix *-[i]n*, e.g., *n-á(-t-an[-in])* for **n-á-t-in[-in]* 'having done/made (to/for) me' < *-t-* 'to do, make'.

14. The form in *-i-ar* is also used infinitivally as the predicative complement of some phasal and modal verbs, such as *du-ún-* 'to begin (to)', *ar -mán-* 'to be afraid (of/to)', *asiir man-* 'to be near (to)', *tayáar man-* 'to be ready/about (to)'.
15. When the pronominal prefix refers to the same argument as the personal ending, the verb must be intransitive and usually "nonactive", i.e., nonvolitional.
16. Compare, for example, Burushaski and English:

- (i) *Duyúú-mo şapík n-i-şi-n* *čái mi-y-áa* *bá-a*,
 noon-ADJ bread CP-3MXYSG.DO-eat-CP tea drink-DUR-1SG.SU AUX-1/2SG.SUBJ
saásaŋu-mo şapík n-i-şi-n *čái oó-mi-y-a*
 evening-ADJ bread CP-3MXYSG.DO-eat-CP tea NEG-drink-DUR-1SG.SUBJ
bá-a.
 AUX-1/2SG.SUBJ
 'I drink tea after eating lunch, I do not drink tea after eating dinner.'
 = ?'I drink tea having eaten lunch, I do not drink tea having eaten dinner.'
- (ii) *Duyúú-mo şapík n-i-şi-n* *čái oó-mi-y-a* *bá-a*,
 noon-ADJ bread CP-3MXYSG.DO-eat-CP tea NEG-drink-DUR-1SG.SU AUX-1/2SG.SUBJ
saásaŋu-mo şapík n-i-şi-n *čái mi-y-áa* *bá-a*.
 evening-ADJ bread CP-3MXYSG.DO-eat-CP tea drink-DUR-1SG.SU AUX-1/2SG.SUBJ
 'I do not drink tea after eating lunch, I drink tea after eating dinner.'
 = ?'I do not drink tea having eaten lunch, I drink tea having eaten dinner.'
- (iii) *Duyúú-mo şapík n-i-şi-n* *čái oó-min*, *saásaŋu-mo şapík*
 noon-ADJ bread CP-3MXYSG.DO-eat-CP tea NEG-drink(IMPV) evening-ADJ bread
n-i-şi-n *čái min-él*
 CP-3MXYSG.DO-eat-CP tea drink-IMPV
 'Don't drink tea after eating lunch, drink tea after eating dinner!'
 = ??'Don't drink tea having eaten lunch, but having eaten dinner!'

17. One may explain the variable scope in the same way as alternative constituent bracketing in attributive structures, cf. English *old men and women* which can be (i) *old (men and women)* or (ii) *(old men) and women*.
18. It is worth mentioning that dependency is not conterminous with subordination or embedding: even a finite coordinated clause may be syntactically and semantically dependent on its conjunct for a coreferential, elliptically deleted constituent.
19. Examples of conjunct scope integration with Burushaski conjunctive participles in contrast with English contextual converbs are the following:

- (i) *Duyúú-mo şapík n-i-şi-n* *čái mi-y-áa* *bá-a*.
 noon-ADJ bread CP-3MXYSG.DO-eat-CP tea drink-DUR-1SG.SUBJ AUX-1/2SG.SUBJ
 'I eat lunch and [then I] drink tea.'
 (??'Eating lunch, I drink tea.' ≠ 'Having eaten lunch, I drink tea.')

- (ii) *Duṃṃi-mo śapīke n-i-ṣi-n* *čaji oó-mi-y-a* *bá-a.*
 noon-ADJ bread CP-3MXYSG.DO-eat-CP tea NEG-drink-DUR-1SG.SUBJ AUX-1/2SG.SUBJ
 'I don't drink tea after eating lunch.' Or? 'I don't eat lunch and drink tea.'
 ??'Eating lunch, I don't drink tea.' ≠ 'Having eaten lunch, I don't drink tea.'
20. I stress modern in this context: the Classical Greek aorist conjunctive participle as well as the Old Slavonic preterite participle could implicitly share the mood of the main clause (Ružička 1963: 78–82). Hence I do not entirely agree with Fox's (1983) conclusion that on the basis of transitivity considerations they express primarily backgrounded information. Rather, low transitivity may correlate with low discourse prominence in narrative discourse.
21. For example, Hindi:
- (i) *Ab uttar Bhārat yā dakṣiṇ Bhārat se koī netā āge ā-kaṛ sab*
 now north India or south India from some leader forward come-CP all
kuch apn-e bāth mē nahī thām l-e-g-ā.
 something own-OBL hand in not grasp take-3SG-FUT-MSG
 'Now a leader from North India or South India will not come and take everything in his hand.' = 'Now no leader from North India or South India will come and take everything in his hands.' (*Navbhārat Tāims, Nat Dillī*, 5 June 1991, p. 7)
22. The only verb form that cannot be negated is the conjunctive participle. Instead the negated aorist participle is used.
23. Compare (a) Hindi-Urdu and (b) Burushaski:
- (i) a. ??*Kyā vah dost-ō se mil-kaṛ der se ā-y-ā?*
 Q (s)he friend-OBL-PL with meet-CP lateness with come-RET-MSG
 'Did he come late because of having met [his] friends?' (Davison 1981: 109)
- b. ('In-ar) *ṣugūlo-tiṅ thūmuk n-ū-man iné*
 (s)he-DAT friend-PL encounter CP-3HXPL.SUBJ-become (s)he
i-kehāran-im-i-a?
 3MXYSG.SUBJ-be.late-ST-3MXYSG.SUBJ-Q
- (ii) a. ??*Yah cāy pī-kaṛ nahī jā-e-g-ā.*
 (s)he tea drink-CP not go-3SG-FUT-MSG
 'He will not go after drinking tea.' (Davison 1981: 113)
- b. *Iné čaji nu-mīn oó-ni-č-i.*
 (s)he tea CP-drink NEG-go-DUR-3MXYSG.SUBJ
24. For example, Hindi-Urdu: *kaṛ jānā/denā/lenā*, etc. 'having done [or: doing] go/give/take' = 'do all the way/for or to somebody/for oneself'. The simultaneous same-subject converb does, however, occur in secondary aspects with auxiliaries like "to be", "to go" and "to come" (Berger n. d.: section 14.43).
25. For example, Indonesian:
- (i) *Se-tiba di kota dia datang ke rumah kami.*
 same-come in town (s)he come to house we(EXCL)
 'Immediately on coming to town, (s)he came to our house.' (Laakso 1986: 75; cf. Kwee 1965 [1990]: 103)
26. From the archaeological as well as linguistic point of view it is interesting to observe that the so called Kashmir Neolithic (*Burzahom I-II* 2500–1500 B. C.) shows unmistakable connections

with north China (Allchin–Allchin 1982: 116) and east Tibet (Chaolong 1991). These very features spread to Swat (*Ghalegay III* 2000–1800 B.C.) just before the coming of the early Indo-Aryans into that region. Early loanwords from Old Indo-Aryan into Burushaski and vice versa indicate that the Burusho were not far from Swat in those times. The language(s) of the Kashmir Neolithic may have been the same as in Swat in 2000–1800 B.C., but if we are to judge from the early Indo-Aryan linguistic innovations, this language was probably not Burushaski. Can it have been Sino-Tibetan?

References

- Allchin, Bridget–Raymond Allchin
 1982 *The rise of civilization in India and Pakistan*. Cambridge: Cambridge University Press.
- Bashir, Elena
 to appear Mosaic of tongues: Quotatives and complementizers in northwest Indo-Aryan, Burushaski, and Balti, in: W. Hanaway (ed.), *Studies of Popular Culture in Pakistan*. Islamabad: Lok Virsa.
- 1985 “Towards a semantics of the Burushaski verb,” in: Arlene, R. K. Zide–David Magier–Eric Schiller (eds.), *Proceedings of the Conference on Participant Roles: South Asia and adjacent areas*. An ancillary meeting to the CLS regional meeting, April 25th, 1984, University of Chicago. Bloomington: Indiana University Linguistics Club, 1–32.
- Berger, Hermann
 1974 *Das Yasin-Burushaski (Werchikwar)*. *Grammatik, Texte, Wörterbuch*. (Neuindische Studien, 3.) Wiesbaden: Otto Harrassowitz.
- 1991 Das Burushaski – Schicksale einer zentralasiatischen Restsprache. Vortrag in der Heidelberger Akademie der Wissenschaften, 12. 1. 1991. [Unpublished manuscript.]
- n. d. Die Burushaski-Sprache von Hunza und Nager: Part 1: Grammatik. Part 2: Texte mit Übersetzungen und Anmerkungen. Part 3: Hunza-Wörterbuch. [Unpublished manuscript.]
- Buddruss, Georg
 1983 “Domáaki éhot ‘Ton’. Mit Beiträgen zur historischen Lautehre”, *Münchener Studien zur Sprachwissenschaft* 42: 5–21.
- Chaolong, Xu
 1991 “The cultural links over the Himalaya ranges in the prehistoric period,” *Orient* 27: 12–35.
- Davison, Alice
 1981 “Syntactic and semantic indeterminacy resolved: A mostly pragmatic analysis for the Hindi conjunctive participle”, P. Cole (ed.), *Radical pragmatics*. New York: Academic Press, 101–128.
- 1986 “Hindi -kar: The problem of multiple syntactic interpretation”, in: Bhadriraju Krishnamurti–Colin Masica–A. K. Sinha (eds.), *South Asian languages: Structure, convergence and diglossia* (Proceedings of the Second International Conference on South Asian Languages and Linguistics, Jan. 9–11, 1980, Osmania University of Hyderabad), (MLBD Series in Linguistics, 3.) Delhi: Motilal Banarsidass, 1–13.
- Foley, William A.–Robert D. van Valin Jr.
 1984 *Functional syntax and universal grammar*. (Cambridge Studies in Linguistics, 38.) Cambridge: Cambridge University Press.

- Fox, Barbara
1983 "The discourse function of the participle in Ancient Greek", in: F. Klein-Andreu (ed.), *Discourse Perspectives on Syntax*. New York: Academic Press, 23–41.
- Fremont, Annette
1982 Contribution à l'étude de Burushaski. Dix-neuf récits inédits de Raja Ali Ahmed Jan (Nagrit) avec mot-à-mot, traduction, notes, commentaires et lexique. Thèse de Doctorat de Troisième Cycle. Université de la Sorbonne Nouvelle. Paris III.
1989 "Quelques remarques à propos de l'absolutif de reprise en burushaski", in: Colette Caillat (ed.), *Dialectes dans les littératures indo-aryennes*. (Publication de l'Institut de Civilisation Indienne. Série in -8°. Fascicule 55.) Paris: Collège de France, 557–567.
- Haspelmath, Martin
1991 "On the question of deep ergativity: The evidence from Lezgian." *Papier zur Linguistik* 44/45 (1/2) 2–27.
- Hock, Hans Heinrich
1982 "The Sanskrit quotative: A historical and comparative study", *Studies in the Linguistic Sciences* 12 (2): 39–85.
- Hook, Peter Edwin
to appear Kesar of Layul: A Central Asian epic in the Shina of Gultari, in: W. Hanaway (ed.), *Studies of popular culture in Pakistan*. Islamabad: Lok Virsa.
- Juldašev, Axnef A.
1977 *Sootnošenje deepričastnyx i ličnyx form glagola v tjurkskix jazykax* [The relation between converbal and personal verb forms in Turkic languages]. Moscow: Izdatel'stvo Nauka.
- Klaiman, M. H.
1983 "Bengali conjunctive participle constructions", *Proceedings of the Berkeley Linguistic Society* 9: 138–147.
- König, Ekkehard–Johan van der Auwera
1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert–Giuliano Bernini–Claude Buridant (eds.), *Towards a typology of European languages*. (Empirical Approaches to Language Typology, 8.) Berlin–New York: Mouton de Gruyter, 337–355.
- Kwee, John B.
1965 *Indonesian. (Teach Yourself Books.)* (Second edition) Sevenoaks, Kent: Hodder and Stoughton.
- Laakso, Pertti
1986 Nusantara. Kielen, kulttuurien ja etnien mosaiikki. Kursus dasar bahasa Indonesia. [Nusantara. A mosaic of languages, cultures and ethnic groups. A basic course of the Indonesian language. In Finnish.] [Mimeographed typescript, Helsinki.]
- Longacre, Robert E.
1976 *An anatomy of speech notions*. (P & R Publications in Tagmemics, 3.) Lisse: The Peter de Ridder Press.
- Lorimer, David Lockhart Robinson
1935 *The Burushaski language*. Vol. 1: *Introduction and Grammar*, Vol. 2: *Texts and Translations*, (Institutet for Sammenlignende Kulturforskning, Serie B: Skrifter 29: 1–3.) Oslo: H. Ashehong and Company.
1937 "Burushaski and its alien neighbours: Problems in linguistic contagion", *Transactions of the Philological Society* 1937: 63–98.
1938 *The Burushaski language*. Vol. 3: *Vocabularies and Index*. Oslo: H. Ashehong and Company.

- 1939 *The Dumaki language. Outlines of the speech of the Doma, or Bêricho, of Hunza.* (Comité International Permanent de Linguistes, Publications de la Commission d'Enquête Linguistique, IV.) Nijmegen: Dekker-van de Vegt N. V.
- n. d. Linguistic materials, for the most part unpublished, bequeathed to the School of Oriental and African Studies, University of London. (Cited according to the handlist of manuscripts in Lt.-Col. D. L. R. Lorimer's collection, published by the Library of the School of Oriental and African Studies.)
- Morin, Yves-Charles-Étienne Tiffou
1988 "Passive in Burushaski", in: M. Shibatani (ed.), *Passive and voice*. (Typological Studies in Language, 16.) Amsterdam-Philadelphia: John Benjamins, 493-524.
- Nedjalkov, Vladimir P.
this volume "Some typological parameters of converbs".
- Růžicka, Rudolph
1963 "Das Syntaktische System der Altslavischen Partizipien und sein Verhältnis zum Griechischen", in: H. H. Bielefeldt (ed.), *Deutsche Akademie der Wissenschaften zu Berlin, Veröffentlichungen des Instituts für Slavistik*, 27. Berlin: Akademie Verlag.
- Schulz, Peter
1978 *Verbalnomina und Konverbia als adverbiale Ergänzungen im Alttürkischen*. Inaugural-Dissertation zur Erlangung des Doktorsgrades im Fachbereich Sprachen und Kulturen des Mittelmeerraumes und Osteuropas der Justus-Liebig-Universität Gießen. Frankfurt am Main.
- Steever, Sanford B.
1988 *The serial verb formation in the Dravidian languages*. (MLBD in Linguistics, Volume IV.) Delhi: Motilal Banarsidass.
- Thompson, Sandra A.
1983 "Grammar and discourse: The English detached participial clause", in F. Klein-Andreu (ed.), *Discourse perspectives on syntax*. Academic Press: New York, 43-65.
- Tiffou, Étienne
1977 "L'effacement de l'ergatif en bourouchaski." *Studia Linguistica* 31: 18-37.
- Tiffou, Étienne (with the assistance of Y. Ch. Morin, H. Berger, D. L. R. Lorimer, Nasir Ouḍḍin Hunzai)
1993 *Hunza Proverbs*. Calgary: The University of Calgary Press.
- Tiffou, Étienne-Yves-Charles Morin
—1982 "A note on split ergativity in Burushaski", *Bulletin of the School of Oriental and African Studies* 45: 88-94.
- Tiffou, Étienne-Jürgen Pesot
1989 *Contes du Yasin. Introduction au bourouchaski du Yasin avec grammaire et dictionnaire analytique*. (Asie et Monde Insulinien 16.) Paris: Peeters-Selaf.
- Tikkanen, Bertil
1987a *The Sanskrit gerund: A synchronic, diachronic and typological analysis*. (Studia Orientalia, 62.) Helsinki: Societas Orientalis Fennica.
- 1987b "Finiteness and non-finiteness as parameters in clause linkage", in: Pirkko Lilius-Mirja Saari (eds.), *The Nordic languages and modern linguistics 6* (= Proceedings of the Sixth International Conference of Nordic and General Linguistics in Helsinki, August 18-22, 1986. Helsinki: Helsinki University Press, 405-419.
- 1988 On Burushaski and other ancient substrata in Northwestern South Asia. *Studia Orientalia* (Helsinki) 64: 303-325.
- 1991 "A Burushaski folktale, transcribed and translated: The frog as a bride, or, The three princes and the fairy princess Salaasir." *Studia Orientalia* (Helsinki) 67: 65-125.

Trumpp, Ernst

- 1876 "Über den Zustandsausdruck in den semitischen Sprachen, speciell im Arabischen", *Sitzungsberichte der philosophisch-philologischen und historischen Classe der K. Bayerischen Akademie der Wissenschaften zu München* 1 (2): 119–170.

Zarubin, I. I.

- 1927 Veršikskoe narečie kandžut'skogo jazyka. *Zapiski Kollegii Vostokovedov* 2 (2): 275–364. Leningrad: Nauka.

A bibliography of converbs

Martin Haspelmath

This bibliography consists of two parts: an alphabetical list of publications, and a language index. Only specialized works on converbs have been included. For many languages, a lot of information can of course be found in reference grammars and other more general publications.

Alphabetical list of publications on converbs

Aalto, Pentti

- 1949 *Untersuchungen über das lateinische Gerundium und Gerundivum*. (Annales Academiae Scientiarum Fennicae, Series B, 62: 3) Helsinki.
1951 "L'origine du gérondif absolu", *Neuphilologische Mitteilungen/Bulletin de la Société Neophilologique de Helsinki* 52: 145–157.

Abbi, Anvita

- 1984 "The conjunctive participle in Hindi-Urdu", *International Journal of Dravidian Linguistics* 13(2): 252–263.

Alatyrev, V. I.

- 1967 "Sub'ektnaja deepričastnaja konstrukcija' i ee proisxoždenie" [The "subject-converb construction" and its origin], in: *Voprosy finno-ugorskogo jazykoznanija* [Questions of Finno-Ugrian linguistics]. Issue 4. Iževsk: 53–68.

Alekseev, D. A.

- 1959 "Deepričastija v složnopodčinennom predložении v burjatskom jazyke" [Converbs in the subordinate sentence in Buryat], *Učenyje zapiski Leningradskogo gosudarstvennogo universiteta* 282. (Setija vostokovedčeskix nauk, Issue 2.) Leningrad: LGU, 170–184.

Altmann de Souza Campo, O. G. L.

- 1972–1973 "O gerundio românico: estudo historico descritivo", in: *Miscelânea de estudos dedicados ao professor Theodoro Henrique Maurer Jr.* Marília, Brazil: Faculdade de letras, 383–402.

Amogolonov, D. D.

- 1948 *Deepričastie v burjat-mongol'skom jazyke* [The converb in the Buryat-Mongolian language]. Ulan-Ude.

Andronov, Mixail S.

- 1981 "The etymology of conditional verbal participles in Dravidian", in: Bhakti P. Mallik (ed.), *Guniti Kumar Chatterji commemoration volume*. Burdwan: University of Burdwan, 41–44.

Annema, H.

- 1924 *Die sogenannten Partizipalkonstruktionen im Neuhochdeutschen*. Groningen: de Waal.

Antonini, A.

- 1974–1975 "Il problema del gerundio", *Studi di grammatica italiana* 4: 85–107.

Apresjan, Jurij D.

- 1983 "O strukture značenijazykovyx edinic" [On the structure of meanings of linguistic units], in: Teresa Dobrzyńska-Elżbieta Janus (eds.), *Tekst i zdanie: zbiór studiów* [Text and sentence: a collection of studies]. Wrocław: Wydawnictwo Polskiej Akademii Nauk, 313–339.

Arnavielle, T.

- 1981 "A propos du fonctionnement des formes verbales en -ant en français moderne", *Revue des langues romanes* 85: 37–52.

Askarova, M.

- 1950 *Deepričastie v sovremennom uzbekskom jazyke* [The converb in modern Uzbek]. [Ph. D. dissertation, Tashkent.]

Avram, M.

- 1986 "Există un gerunziu trecut în limba română?", *Studii și cercetări lingvistice* 1986(2).

Babby, Leonard H.

- 1979 "The syntax of gerunds in Russian", in: Linda Waugh–Frans van Coetsem (eds.), *Contributions to grammatical studies: Semantics and syntax*. Leiden: Brill, 1–41.

Babuškin, Georgij F.

- 1959 "O značenijax i sintaksičeskix funkcijax deepričastij v tuvinskom jazyke" [On the meanings and syntactic functions of converbs in Tuva], *Učenyje zapiski Tuvinskogo naučno-issledovatel'skogo instituta jazyka, literatury, i istorii*. Issue 7. Kyzyl.

Bartens, Raija

- 1979 *Mordvan, tšeremissin ja votjakien konjugatsiooninfiniitisten muotojen syntaksi*. (Mémoires de la Société Finno-Ougrienne 170.) Helsinki.

Bartholomae, C.

- 1901 "Arica XIV: 98. Absolutivbildungen im Awesta", *Indogermanische Forschungen* 12: 141–150.

Benveniste, Émile

- 1935 "Les absolutifs avestiques", *Mémoire de la Société de linguistique de Paris* 23: 393–402.

Bickel, Balthasar

- 1991 *Typologische Grundlagen der Satzverkettung: Ein Beitrag zur allgemeinen Grammatik der Satzverbindung und des Fährtenlegens*. (Arbeiten des Seminars für Allgemeine Sprachwissenschaft der Universität Zürich 9.) Zürich: Universität Zürich.

Bobes Naves, María del Carmen

- 1975 "Sistema, norma y uso del gerundio castellano", *Revista Española de Lingüística* 5: 1–34.

Bobran, Marian

- 1974 *Konstrukcje syntaktyczne z imiesłowami nieodmiennymi w języku polskim i rosyjskim* [Syntactic constructions with indeclinable participles in Polish and Russian]. Rzeszów: Wydawnictwo naukowe WSP.

- 1987 "Obščie zamečanija o častotnosti upotreblenija deepričastnyx oborotov v sovremennom pol'skom i russkom jazykax" [General remarks on the frequency of use of converbal constructions in modern Polish and Russian], *Linguistische Arbeitsberichte (Leipzig)* 63: 84–88.

Boguslavskij, Igor' M.

- 1977 "O semantičeskom opisanii russkix deepričastij: neopredelennost' ili mnogoznačnost'?" [On the semantic description of Russian converbs: Vagueness or polysemy?], *Izvestija AN SSSR, Serija literatury i jazyka* 1977(3) 270–281.

Bovtruk, N. I.

- 1956 *Deepričastnye konstrukcii v sovremennom ukrainskom jazyke* [Converbal constructions in modern Ukrainian]. [Unpublished Ph. D. dissertation, Kiev.]

- Bouzet, Jean
1953 "Le gérondif espagnol dit 'de postériorité'", *Bulletin Hispanique* 55: 349–374.
- Brecht, Richard D.
1976 "The Russian verbal adverb: A case study of grammar change", in: Ladislav Matejka (ed.), *Sound, sign, and meaning: Quinquagenary of the Prague Linguistic Circle*. (Michigan Slavic contributions 6.) Ann Arbor: University of Michigan, 271–290.
- Brendemoen, Bernt-Éva Ágnes Csató
1987 "A syntactic analysis of gerundial clauses with subject control", in: Hendrik E. Boeschoten–Ludo Th. Verhoeven (eds.), *Studies on modern Turkish*. Tilburg: Tilburg University Press, 121–135.
- Brodskaja, Larisa M.
1980 "Pričastnye i deepričastnye konstrukcii v sostave složnopodčinennogo predloženiia" [Participial and converbal constructions within the subordinate clause], in: Majja I. Čeremisina (ed.) *Infinitnye formy glagola* [Nonfinite forms of the verb]. Novosibirsk: Sibirskoe otdelenie AN SSSR, 32–43.
- Bungarten, Theo
1976 *Präsentische Partizipialkonstruktionen in der deutschen Gegenwartssprache*. (Schriften des Instituts für deutsche Sprache, 38.) Düsseldorf: Schwann.
- Caragiu, M.
1957 "Sintaxa gerunziului românesc" [The syntax of the Rumanian gerund], in: *Studii de gramatică*, Vol. 2. Bucharest.
- Carballo Calero, R.
1975 "Xerundio galego con desinencias persoais" [Galician gerund with personal endings], in: *Filología y didáctica hispánica. Homenaje al profesor Hans-Karl Schneider*. Hamburg.
- Caro, Miguel Antonio
1976 [1870] *Tratado del participio*. Yerbabuena, Colombia: Instituto Caro y Cuervo.
- Čeremisina, Majja I.
1977 "Deepričastie kak klass form glagola v jazykax raznyx sistem" [The converb as a class of verb forms in structurally diverse languages], in: Majja I. Čeremisina (ed.), *Složnoe predloženie v jazykax raznyx sistem* [The complex sentence in structurally diverse languages]. Novosibirsk: Sibirskoe otdelenie AN SSSR, 3–28.
1980 "Monosub'ektnaja konstrukcija. Ponjatie i tipologija" [Same-subject construction: Concept and typology], in: Majja I. Čeremisina (ed.), *Polipredikativnye konstrukcii i ix morfoložičeskaja baza* [Multipredicate constructions and their morphological base]. Novosibirsk: Sibirskoe otdelenie AN SSSR.
1981 "K voprosu o sistemnyx otnošenijax meždu finitnymi, pričastnymi i deepričastnymi formami glagol'nogo slova (na materiale altajskix jazykov)" [On the question of systematic relations between finite, participial and converbal forms of the verb (using data of Altaic languages)], in: *Teoretičeskie voprosy fonetiki i grammatiki jazykov narodov SSSR*. [Theoretical questions of phonology and grammar of the languages of the peoples of the USSR] Novosibirsk: Sibirskoe otdelenie AN SSSR, 3–18.
- Čeremisina, Majja I.–Šamina, Ljudmila A.
1986 "Konstrukcii s deepričastnoj zavisimoj čast'ju v tjurkskix jazykax Južnoj Sibiri" [Constructions with a converbal dependent in Turkic languages of South Siberia], in: Ubrjatova–Litvin (eds.), 144–158.
- Chmeliček, Hans
1930 *Die Gerundialumschreibung im Altspanischen zum Ausdruck von Aktionsarten*. (Hamburger Studien 5.) Hamburg: Seminar für Romanische Sprachen und Kulturen der Universität Hamburg.

Cirstea, Mihaela

- 1972 "Un costrutto perifrastico con valore aspettuale nell' italiano contemporaneo", in: *Scritti e ricerche di grammatica italiana*. Trieste: LINT, 139–157.

Cypanov, Evgenij

- 1987 "Odná innovácija v komi literaturnom jazyke" [One innovation in standard Komi], *Sovetskoe Finno-Ugrovedenie* 23(4): 256–261.

Dan, Mina

- 1988 "Subject of gerund in Bangla case marking", *International Journal of Dravidian Linguistics* 17(1): 140–145.

Dasgupta, Probal

- 1986 "Gerunds, participles and the theory of categories", *Bulletin of the Deccan College Research Institute* 45: 7–18.

Davison, Alice

- 1981 "Syntactic and semantic indeterminacy resolved: A mostly pragmatic analysis for the Hindi conjunctive participle", in: Peter Cole (ed.), *Radical pragmatics*. New York: Academic Press, 101–128.
- 1986 "Hindi *-kar*: The problem of multiple syntactic interpretation", in: Bh. Krishnamurti–Colin Masica–A. K. Sinha (eds.), *South Asian Languages: Structure, convergence and diglossia*. (Proceedings of the Second International Conference on South Asian Languages and Linguistics, January 9–11, 1980, Osmania University of Hyderabad; MILDDB Series in Linguistics, 3.) Delhi: Motilal Banarsidass, 1–13.

de Boer, C.

- 1929a "Remarques sur la fonction et l'histoire du gérondif français", *Archivum Romanicum* 13: 417–438.
- 1929b *Over functie en geschiedenis van de franse "gérondif"*. [On the function and history of the French *gérondif*] (Med. der Kon. Ac. v. Wetenschappen, afd. Letterkunde, deel 67, serie A, No. 3)

de Groot, Casper

- 1987 "On the predicative verbal adverbial construction in Hungarian", in: István Kenesei (ed.), *Approaches to Hungarian. Vol. 2. Theories and analyses*. Szeged: JATE, University of Szeged, 273–298.

De La Peña, Rafael A.

- 1955 [1889] *Tratado del gerundio*. (Memorias de la Academia Mexicana, 3.) Mexico: Ed. Jus.

Deshpande, Madhav M.

- 1981 "Sanskrit gerund constructions: Syntactic disputations", *Indo-Iranian Journal* 23: 167–185.

de Souza Campos, Odette A.

- 1980 *O gerundio no português: estudo histórico*. Rio de Janeiro: Presença Edições.

Díaz Bautista, María del Carmen

- 1986 *Aspectos sintácticos y semánticos del gerundio español*. Madrid: Imprenta SABA, S. L.

Dmitrieva, L. K.

- 1980 "Dēepričastie i obosoblenie obstojaťel'stv" [The converb and the isolation of adverbials], in: *Funkcional'nyj analiz grammatičeskix edinic* [Functional analysis of grammatical units], issue 3. Leningrad.

Drăghicescu, Janeta

- 1977 "Le gérondif – caractérisant du verbe", in: *Cahiers de grammaire 2. Le caractérisant verbal*, C. M. U. B., 122–160.

- 1980 "Les formes verbales françaises en *-ant* et l'expression du temps", in: *Le verbe roman*, Bulletin de la S. R. L. R., XIV, 119–127.
 - 1989 "Pour une grammaire du transcodage du 'gérondif' roumain", *Revue Roumaine de Linguistique* 34(3): 267–272.
 - 1990 "Remarques sur la construction 'gerunziu cu acuzativ'", *Revue Roumaine de Linguistique* 35(4–6): 303–307.
- Dwarikesh, D. P. S.
- 1971 *The historical syntax of the conjunctive participle phrase in the New Indo-Aryan dialects of the Madhyadesa ("Midland") of Northern India*. [Ph. D. dissertation, University of Chicago.]
- Džanmavov, Jusup D.
- 1967 *Deepričastija v kumyksom literaturnom jazyke (sравnitel'no s drugimi tjurkскими языками)*. [Converbs in standard Kumyk (in comparison with other Turkic languages)] Moscow: Nauka (Glavnaja redakcija vostočnoj literatury).
- Edelstein, F.
- 1975 *Sintaxa gerunziului românesc*. [The syntax of the Rumanian gerund]. Bucharest: Editura Academiei.
- Eiche, A.
- 1983 *Latvian declinable and indeclinable participles: their syntactic function, frequency, and modality*. (Acta Universitatis Stockholmiensis, Stockholm Studies in Baltic Languages 1.) Stockholm: Almqvist-Wiksell International.
- Ferrel, James
- 1951 "The past gerunds of the imperfective aspect in modern Russian", *Slavic and East European Review* 30(74): 164–174.
- Filipović, Nada
- 1977 *Die Partizipialkonstruktionen in der deutschen dichterischen Prosa von heute*. (Forschungsberichte des Instituts für deutsche Sprache Mannheim 32.) Tübingen: Narr.
- Fokos-Fuchs, D. R.
- 1958 "Die Verbaladverbien der permischen Sprachen", *Acta Linguistica Academiae Scientiarum Hungaricae* 8: 273–342.
- Fox, Barbara
- 1983 "The discourse function of the participle in Ancient Greek", in: Flora Klein-Andreu (ed.), *Discourse perspectives on syntax*. New York: Academic Press, 23–41.
- Gabinschi, Marc A.
- 1991 *Din problemele gramatici și derivării române*. Chișinău: Știința.
- Gabinskij, Mark A.
- 1974a "Gerundizacija imeni dejstvija v makedonskom jazyke" [The gerundization of the action noun in Macedonian], in: *III Congrès International d'études du Sud-Est Européen*. Bucharest.
 - 1974b *Gerundizacija imeni dejstvija v makedonskom jazyke* [The gerundization of the action noun in Macedonian]. Moscow.
- Garner, Samuel
- 1887–1889 "The gerundial construction in the Romance languages", *Modern Language Notes* 2: 109–117, 271–281; 3: 185–192, 263–270, 425–437; 4: 133–145, 258–274.
- Gettrup, Harald
- 1977 "Le gérondif, le participe présent et la notion de repère temporel", *Revue Romane* 12(2): 211–271.
- Gladney, Frank Y.
- 1966 *Some observations on the syntax of gerunds in 17th century Russian*. [Unpublished Ph. D. dissertation, Harvard University.]

- Gonda, J.
 1967 "On the use of the absolutive in Sanskrit", in: Baburam Saksena (ed.), *Kavirāj Abhinandana Grantha*. Lucknow, 262–265.
 [1975] [Reprinted in: Gonda, J. *Selected studies*, 3: *Sanskrit: Grammatical and philological studies*. Leiden: E. J. Brill, 91–94.
- Gorelova, Liliya M.
 1980a "Funkcii èvenkijskix pričastij i ix otnošenija k deepričastijam" [The functions of Evenki participles and their relations to converbs], in: Majja I. Čeremisina (ed.), *Infinitnye formy glagola*. [Nonfinite forms of the verb] Novosibirsk: Sibirskoe otdelenie AN SSSR, 3–31.
 1980b "O semantičeskix sootvetstvijax meždu prostymi i složnymi deepričastijami v èvenkijskom jazyke" [On the semantic correspondences between simple and complex converbs in Evenki], in: Majja I. Čeremisina (ed.) *Podčinenie v polipredikativnyx konstrukcijax*. [Subordination in multipredicate constructions]. Novosibirsk: Sibirskoe otdelenie AN SSSR.
- Grybosiowa, Antonina
 1975 *Rozwój funkcji składniowej imiesłowów nieodmiennych w języku polskim: Związki z nomen*. [The development of the syntactic function of indeclinable participles in Polish: Connections with the noun] (Prace Komisji Językoznawstwa 42.) Wrocław: Państwowe Wydawnictwo Naukowe.
- Gune, P.
 1913 *Die altindischen Absolutiva, besonders im Rgveda, Aitareya- und Śatapathabrāhmaṇa – ein Beitrag zur altindischen Syntax*. [Unpublished Ph. D. dissertation, University of Leipzig]
- Haas, O.
 1956 "Die griechischen Absolutiva auf -da, -dēn, -don", in: *Mnēmēs kharin – Gedenkschrift Paul Kretschmer*, 1. Wiesbaden: Otto Harrassowitz, 130–145.
- Haiman, John
 1985 *Natural syntax*. Cambridge: Cambridge University Press.
- Halmøy, Jane-Odile
 1982 *Le gérondif: Éléments pour une description syntaxique et sémantique*. (Contributions Norvégiennes aux Études Romanes 6.) Trondheim: Tapir.
- Hamp, Eric P.
 1986 "On the morphology of Indic gerunds", *Indo-Iranian Journal* 29: 102–109.
- Hatcher, A. G.–M. Musa
 1970/71 "On a certain pattern of the expanded verbal form in Italian: *Chino su di lei, stava guardandola, quando ...*", *La linguistique* 6(1): 51–64.
- Hausmann, Franz Josef
 1975 "Die Austauschbarkeit von *participe présent* und *gérondif* im geschriebenen Französisch der Gegenwart", in: Ulrich Engel–H. Schumacher (eds.), *Kongressbericht der 6. Jahrestagung der Gesellschaft für angewandte Linguistik*, Vol. 4. Heidelberg: Groos, 120–128.
- Hendriksen, Hans
 1944 *Syntax of the infinite verb forms of Pali*. Copenhagen: Munksgaard.
- Henrichsen, Arne Johan
 1967 "Quelques remarques sur l'emploi des formes verbales en -ant en français moderne", *Revue Romane* 2(2): 97–107.
- Hock, Hans Henrich
 1987 "Reduced-clause and clause-union absolutes and participles in Vedic prose", in: E. Bashir et al. (eds.), *Select papers from SALA-7 (VIIth South Asian Languages Analysis Roundtable)*. Bloomington: Indiana University Linguistics Club, 182–198.

- Höck, Christoph
1979 *Zur syntaktischen und kommunikativen Struktur slavischer Partizipial- und Gerundialkonstruktionen*. München: Otto Sagner.
- Hrabě, V.
1964 *Polovětné vazby a kondenzace "druhého sdělení" v ruštině a v češtině*. [Half-sentence combinations and condensation of 'second communication' in Russian and Czech] Prague.
- Hristea, V.
1967 "Adjectivarea gerunziului" [Adjectivization of the gerund], in: *Studii și materiale privitoare la formarea cuvintelor în limba română*, Vol. 4. Bucharest.
- Il'jašenko, T. P.
1961 "Forme gerundiale în limba moldovenească" [Gerundial forms in the Moldavian language], in: *Issledovanija v oblasti latinskogo i romanskogo jazykoznanija* [Studies in the area of Latin and Romance linguistics]. Kišinev.
- Isanbaev, Nikolaj I.
1961 *Deepričastija v marijskom jazyke* [Converbs in Mari]. Joškar-Ola.
- Ivanova, Malina
1976 "Za prevoda na polskite deepričastija na bŭlgarski ezik" [On the translation of Polish converbs into Bulgarian], *Sŭpostavitelno Ezikoiznanie* 1(2): 5–18.
- Jacobsen, Per
1981 "The function of the simultaneous gerund in Ivo Andrić's novel *Na Drini cuprija*", in: Per Jacobsen et al. (eds.), *The Slavic verb: An anthology presented to Hans Christian Sørensen*, 16th December 1981. Copenhagen: Rosenkilde and Bagger, 70–74.
- Jayaseelam, K. A.
1984 "Control in some sentential adjuncts of Malayalam", *Berkeley Linguistics Society* 10: 623–633.
- Jäger, Gert
1986 "Beobachtungen am polnischen Gerundium I mit imperativischen Bezugsformen", *Linguistische Arbeitsberichte (Leipzig)* 54/55: 28–36.
- Jäger, Gert–Bernd Koenitz
1983 "Zur Semantik der deutschen inkongruenten Partizipien I und der polnischen Gerundien I in adverbialer und nebenprädikativischer Funktion", in: Gerhard Helbig–Gert Jäger (eds.) *Studien zum deutsch-polnischen Sprachvergleich*. Leipzig: Enzyklopädie, 89–136.
- Jäger, Sonja–Gert Jäger
1979 "Einige Bemerkungen zu einer spezifischen Funktion des deutschen inkongruenten Partizips I unter dem Gesichtspunkt ihrer Repräsentation im Spanischen", *Linguistische Arbeitsberichte (Leipzig)* 25: 72–78.
- Jeffers, Robert–Robert Kantor
1984 "A history of the Sanskrit gerund", *Indogermanische Forschungen* 89: 89–103.
- Jimenez Vazquez, José María
1981 "Estudio diacrónico del gerundio español", *Revista de filología y lingüística* 7(1–2): 13–18 (Universidad de Costa Rica).
- Johanson, Lars
1975 "Some remarks on Turkic 'hypotaxis'", *Ural-Altaische Jahrbücher* 47: 104–118.
1988 "On the renewal and reinterpretation of 'instrumental' gerunds in Turkic", *Oriens* 31: 136–153.
1990 "Zur Postterminalität türkischer Gerundien", *Ural-Altaische Jahrbücher N. F.* 9: 137–151.

Juldašev, Axnef A.

1976 "Deepričastie na -p v baškirkom jazyke" [The converb in -p in Bashkir], in: *Tjurkologičeskie issledovanija* [Turkological studies]. Moscow: Nauka, 249–254.

1977 *Sootnošenie deepričastnyx i ličnyx form glagola v tjurkskix jazykax* [The relation between converbal and personal verb forms in Turkic languages]. Moscow: Nauka.

Kachru, Yamuna

1981 "On the syntax, semantics and pragmatics of the conjunctive participle in Hindi-Urdu", *Studies in the Linguistic Sciences* 11(2): 35–49.

Kamilov, Zaxid Sabitovič

1981 *Deepričastija i deepričastnye oboroty v sovremennom bengal'skom jazyke v sopostavlenii s xindi* [Converbs and converbal constructions in modern Bengali in contrast with Hindi]. [Unpublished Ph. D. dissertation, Moscow]

Karpuškin, B. M.

1964 "The absolute adverb in the Bengali language", in: *Questions of the grammar of Bengali*. Moscow: Nauka, 24–61.

Kiss, Katalin É.

1980 "English participles and their Hungarian equivalents", in: László Dezső (ed.), *Studies in English and Hungarian contrastive linguistics*. Budapest: 63–92.

Kitagawa, Chisato

1983 "On the two forms of negative gerund in Japanese", *Papers in Linguistics* 16(1–2): 89–126.

Klaiman, M. H.

1983 "Bengali conjunctive participle constructions", *Berkeley Linguistics Society* 9: 130–147.

Klemenž, P.

1884 *Der syntaktische Gebrauch des Participium praesentis und des Gerundiums im Altfranzösischen*. [Unpublished dissertation, Breslau.]

Koc', L. M.

1961 *Deepričastija v sovremennom ukrainskom literaturnom jazyke (sposoby i xarakter svjazej v predložženii)* [Converbs in modern standard Ukrainian (ways and character of links in the sentence)] [Unpublished Ph. D. dissertation, Kiev.]

König, Ekkehard–Bernd Kortmann

1991 "On the reanalysis of verbs as prepositions", in: Gisa Rauh (ed.), *Approaches to prepositions*, (Tübinger Beiträge zur Linguistik 358). Tübingen: Narr, 109–125.

König, Ekkehard–van der Auwera, Johan

1990 "Adverbial participles, gerunds and absolute constructions in the languages of Europe", in: Johannes Bechert–Giuliano Bernini–Claude Buridant (eds.), *Toward a typology of European languages*. (Empirical Approaches to Languages Typology 8.) Berlin: Mouton de Gruyter, 337–355.

Kononov, Andrej N.

1965 "Opyt rekonstrukcii tjurkskogo deepričastija na -p, -b, -pan, -ban, -bany, -bany (Materialy k sravnitel'no-istoričeskoj grammatike tjurkskix jazykov)" [Tentative reconstruction of the Turkic converb in -p, -b, -pan, -ban, -bany, -bany (Materials for a comparative-historical grammar of the Turkic languages)], *Voprosy jazykoznanija* 1965(5): 100–111.

Konstantinova, O. A.

1953 "Deepričastija v evenkijskom jazyke" [Converbs in Evenki], in: A. Gorcevskij (ed.) *V pomošč' učitelju škol Krajnego Severa* [Helping the teacher of schools of the Extreme North]. Issue 4. Moscow–Leningrad.

- Kooreman, Marion
1989 "The historical development of the ablative of the gerund", *Cahiers de l'Institut de Linguistique de Louvain* 15: 219–230.
- Korkina, Evdokija I.
1985 *Deepričastija v jakutskom jazyke* [Converbs in Yakut]. Novosibirsk: Nauka.
- Kortmann, Bernd
1988 "Freie Adjunkte und absolute Konstruktionen im Englischen und Deutschen", *Papier zur Linguistik* 38: 61–89.
1991 *Free adjuncts and absolutes in English: Problems of control and interpretation*. London: Routledge.
- Kortmann, Bernd–Ekkehard König
1992 "Categorial reanalysis: the case of deverbal prepositions", *Linguistics* 30: 671–697.
- Kotelnik, F.
1971 "Note privind adjectivele gerundiale", *Limba și literatura moldovenească* 1971(2).
- Kovtunova, Irina I.
1964 "Izmenenija v oblasti deepričastnyx oborotov" [Changes in the area of converbal constructions], in: V. V. Vinogradov–N. Ju. Švedova (eds.), *Izmenenija v sisteme prostogo i složennogo predloženia v russkom literaturnom jazyke XIX veka* [Changes in the system of the simple and complex sentence in standard Russian of the nineteenth century]. Moscow: Nauka.
- Kozyrev, M. F.
1958 "Otnositel'no "ustupitel'nogo deepričastija" v mongol'skom jazyke" [Regarding the "concessive converb" in Mongolian], in: *Voprosy jazyka i literatury stran Vostoka* [Questions of language and literature of countries of the East]. Moscow: 175–182.
- Krasil'nikova, E. V.
1973 "Obrazovanija na -a (-ja), -u (-v)š(i's') v razgovornoj reči" [Formations in -a (-ja), -u (-v)š(i's') in the colloquial language], in: E. A. Zemskaja (ed.), *Russkaja razgovornaja reč'* [Russian colloquial speech]. Moscow: Nauka.
- Kudrjavskij, Dmitrij Nikolaevič
1916 "K istorii russkix deepričastij. Vyp. 1. Deepričastija prošedšego vremeni" [On the history of Russian converbs. Issue 1. Past tense converbs], *Učene zapiski Imperatorskogo Jur'evskogo universiteta* 1916, 10.
- Lajmanovich, Josué David
1968 *Sintaxis del gerundio español*. [Unpublished Ph. D. dissertation, Georgetown University.]
- Lambertz, Thomas
1987 "Gerundiale Konstruktionen im Lateinischen und Französischen", in: Wolfgang Dahmen–Günter Holtus–Johannes Kramer–Michael Metzeltin (eds.), *Latein und Romanisch: Romanistisches Kolloquium I* (Tübinger Beiträge zur Linguistik 308.) Tübingen: Narr, 158–196.
- Łęgowska-Grybosiowa, A.
1970 "O składni imiesłowu nieodmiennego" [On the syntax of the indeclinable participle], *Język polski* 50(3).
- Lindholm, James
1975 *The conceptual basis of the Tamil adverbial participle*. [Unpublished Ph. D. dissertation, University of Chicago.]
- Losada Duran, Jose Ramon
1981 "Paralelismos entre el participio en -ING y el gerundio español", *Senara: Revista de Filología* 3: 89–128.

Lyer, Stanislav

1932a "La syntaxe du gérondif dans le *Poema del Cid*", *Revista de Filología Española* 29: 1–46.1932b "Le gérondif en *-ndo* et le participe présent latin", *Revue des Études latines* 10: 222–232; 382–399.1933 "Gérondif présent prédicatif se rapportant au complément du verbe personnel", *Archivum Romanicum* 17: 259–278.1934 *Syntaxe du gérondif et du participe présent dans les langues romanes*. (Thèse pour le doctorat ès lettres présentée à la faculté des lettres de Prague.) Paris: Librairie Droz.

Masica, Colin P.

1976 *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press.

Medici, M.

1986 "Gerundio: il tipo *ballando ballando*", *Lingua nostra* 47(1).

Medveckaja, O.

1962 "Cu privire la funcțiile gerundiului în propoziție", *Învățătorul sovietic* 1962(1).

Menoni, Viviana

1982 "Formazione e storia del gerundio composto nell'italiano antico", *Studi di Grammatica Italiana* 11: 5–88.

Meščaninov, Ivan Ivanovič

1945 *Členy predloženia i časti reči* [Grammatical relations and parts of speech]. Moscow–Leningrad.

Mirambel, André

1961 "Participe et gérondif en grec médiéval et moderne", *Bulletin de la Société de linguistique de Paris* 56(1): 46–79.

Mönch, E.

1912 *Die Verwendung des Gerundiums und des Participium Praesentis im Französischen*. [Unpublished dissertation, Göttingen.]

Mozos Mocha, Santiago de los

1973 *El gerundio preposicional*. (Acta Salmanticensia 73.) Salamanca.1974 "¿Es arabismo sintáctico el gerundio 'de posterioridad'?" *Revista Española de Lingüística* 4: 375–389.

Nedjalkov, Igor' V.

in press "Converbs in the languages of Europe", in: Johan van der Auwera (ed.), *Adverbial relations in the languages of Europe*. Berlin: Mouton de Gruyter.

Nedjalkov, Vladimir P.

1990 "Osnovnye tipy deepričastij" [Main types of converbs], in: Viktor S. Xrakovskij (ed.), *Tipologija i grammatika* [Typology and grammar]. Moscow: Nauka, 36–59.

Nedjalkov, Vladimir P.–Petr I. Inělikej–Vladimir G. Raxtilin

1983 "Čukotskie konstrukcii s sub'ektnym infinitivom" [Chukchi constructions with a subject infinitive], in: Viktor S. Xrakovskij (ed.), *Kategorii glagola i struktura predloženia: Konstrukcii s predikatnymi aktantami* [Verbal categories and sentence structure: Constructions with predicate actants]. Leningrad: Nauka, 221–234.

Nedjalkov, Vladimir P.–Igor' V. Nedjalkov

1988 "Narrativnye deepričastija v karačaevo-balkarskom, mongol'skom, man'čžurskom i nivxskom jazykax" [Narrative converbs in Karachay-Balkar, Mongolian, Manchu, and Nivkh], in: V. V. Bogdanov (ed.), *Predloženie i tekst: semantika, pragmatika i sintaksis* [Sentence and text: Semantics, pragmatics and syntax]. Leningrad: Izdatel'stvo Leningradskogo universiteta, 137–142.

Nedjalkov, Vladimir R.—Galina A. Otaina

- 1987 "Tipologičeskie i sopostavitel'nye aspekty zavisimogo taksisa (na materiale nivxskogo jazyka v sopostavlenii s russkim)" [Typological and contrastive aspects of dependent taxis (based on Nivkh data in contrast with Russian)], in: Aleksandr V. Bondarko (ed.), *Teorija funkcional'noj grammatiki: Vvedenie. Aspektual'nost'. Vremennaja lokalizovanost'*. *Taksis* [Theory of functional grammar: Introduction; Aspectuality; Temporal localization; Taxis]. Leningrad: Nauka.

Nespor, Marina

- 1978 "The syntax of gerunds in Italian", in: Maria-Elisabeth Conte—Anna Giacalone Ramat—Paolo Ramat (eds.) *Wortstellung und Bedeutung*. Akten des 12. Linguistischen Kolloquiums, Pavia 1977, Vol. 1. (Linguistische Arbeiten 61.) Tübingen: Niemeyer, 103–111.

Nevskaja, I. A.

- 1988 "Deepričastija na -p kak komponent osložennogo i složnogo predloženia v šorskom jazyke" [Converbs in -p as a component of the complex sentence in Shor], in: *Komponenty predloženia* [Components of the sentence]. Novosibirsk: 154–168.

Nurmagomedov, M. M.

- 1986 "Obrazovanie deepričastij v avarskom jazyke" [The formation of converbs in Avar], in: Z. G. Abdullaev (ed.), *Voprosy slovoobrazovanija dagestanskix jazykov* [Questions of word formation in Daghestanian languages]. Maxačkala: Dagestanskij filial AN SSSR, 57–62.

Ozete, O.

- 1983 "On the so-called Spanish gerund/participle", *Hispania* 66(1): 75–83.

Parisi, Domenico—Christiano Castelfranchi

- 1976 "Tra ipotassi e paratassi", *Rivista di grammatica generativa* 1(1): 55–98.

Pavlov, I. P.

- 1953 *Deepričastija v čuvašskom jazyke i ix sintaksičeskie funkcii* [Converbs in Chuvash and their syntactic functions]. [Unpublished Ph. D. dissertation, Moscow.]

Peregonceva-Grave, L. V.

- 1955 *Datel'nyj samostojatel'nyj v russkom literaturnom jazyke XII–XVII vv* [The independent dative in standard Russian of the twelfth to the seventeenth centuries]. [Unpublished Ph. D. dissertation, Leningradskij gosudarstvennyi universitet.]

Perevoščikov, Petr N.

- 1959 *Deepričastija i deepričastnye konstrukcii v udmurtskom jazyke* [Converbs and converbal constructions in Udmurt]. Iževsk: Udmurtskoe knižnoe izdatel'stvo.

Perry, John R.

- 1979 "Uzbek influence on Tajik syntax: The converb constructions", in: Paul R. Clyne—William F. Hanks—Carol L. Hofbauer (eds.), *The elements: A parasection on linguistic units and levels*. Chicago: Chicago Linguistic Society, 440–461.

Pezzuto, O.

- 1921 *Del gerundio italiano (origine ed evoluzione storica)*. Lecce.

Pokrovskaja, L. A.

- 1963 "O nekotoryx deepričastnyx formax v gagauzskom jazyke" [On some converbal forms in Gagauz], in: *Tjurkologičeskie issledovanija* [Turkological studies]. Moscow—Leningrad.

Pulgram, Ernst

- 1987 "Nominal-verbal hybrids: participle and gerund in Latin, Italian, English", *Canadian Journal of Italian Studies* 10(35): 99–116.

- Pusch, Luise F.
 1976 "Das gerundio als Ausdruck der Gewichtung: eine kontrastive Untersuchung am Deutschen und Italienischen", *Leuvense Bijdragen* 62(1): 33–68.
 1980 *Kontrastive Untersuchungen zum italienischen 'gerundio'. Instrumental- und Modalsätze und das Problem der Individuierung von Ereignissen.* (Linguistische Arbeiten, 69.) Tübingen: Niemeyer.
 "Ambiguity and vagueness again, or Is the Italian gerundio ambiguous?" *Papers and studies in contrastive linguistics*.
- Račkov, Gennadij E.
 1958 "Vremena deepričastij pervoj i vtoroj grupp v sovremennom korejskom jazyke" [Tenses of converbs of the first and second groups in modern Korean], *Učenyje zapiski LGU*, 236. (Seriya vostokovednyx nauk. Issue 6.) Leningrad: Leningradskij gosudarstvennyj universitet.
- Ramarao, C.
 1971 "Coordination or subordination? A study of Dravidian *ketvarthaka*", *Indian Linguistics* 32: 43–53.
- Ramstedt, Gustaf John
 1903 *Über die Konjugation des Khalkha-Mongolischen.* Helsingfors.
 1952 *Einführung in die altaische Sprachwissenschaft. Vol. 2.* Helsinki.
- Rappaport, Gilbert C.
 1980 "Deixis and detachment in the adverbial participles of Russian", in: Catherine V. Chvany–Richard D. Brecht (eds.), *Morphosyntax in Slavic*. Columbus, OH: Slavica Publishers, 273–300.
 1984 *Grammatical function and syntactic structure: The adverbial participle of Russian.* (UCLA Slavic Studies 9.) Columbus, OH: Slavica Publishers.
- Rath, Reiner
 1971 *Die Partizipialgruppe in der deutschen Gegenwartssprache.* (Sprache der Gegenwart 12.) Düsseldorf: Schwann.
- Reese, Susanne
 1991 *Gerundialkonstruktionen im Spanischen: Ansatz zu einer grammatisch-pragmatischen Beschreibung.* (Tübinger Beiträge zur Linguistik 349.) Tübingen: Gunter Narr Verlag.
- Renou, Louis
 1935 "L'absolutif sanskrit en -ant", *Mémoire de la Société de linguistique de Paris* 23: 359–392.
 1940 "Notes de grammaire védique: 1. Sur l'absolutif", *Bulletin de la Société de linguistique de Paris* 41(2): 208–214.
- Riftin, A. P.
 1937 "O dvux putjax razvitiya složnogo predloženiya v akkadskom jazyke" [On two types of development of the complex sentence in Akkadian], in: *Sovetskoe jazykoznanie*, [Soviet linguistics] Vol. 3. Leningrad: 64.
- Risch, Ernst
 1984 *Gerundivum und Gerundium: Gebrauch im klassischen und älteren Latein; Entstehung und Vorgeschichte.* Berlin: de Gruyter.
- Rjabova, A. I.
 1982 *Uslovija i sposoby realizacii sub"ektnoj valentnosti deepričastija v prostyx dvusostavnyx predloženijax s glagol'nyx i pričastnyx skazuemym* [Conditions and ways of realization of the subject valence in simple bipartite sentences with a verbal and participial predicate]. [Unpublished Ph. D. dissertation, Moscow.]

Rocher, L.

- 1980 "A note on the Sanskrit gerund", in: J. Bingen—A. Coupé—F. Mawet (eds.), *Recherches de linguistique. Hommages à Maurice Leroy*. (Université Libre de Bruxelles, Faculté de Philosophie et Lettres, 73.) Brussels: Éditions de l'Université de Bruxelles, 181–188.

Růžička, Rudolf

- 1963 *Das syntaktische System der altslavischen Partizipien und sein Verhältnis zum Griechischen*. (Deutsche Akademie der Wissenschaften zu Berlin, Veröffentlichungen des Instituts für Slawistik, 27.) Berlin: Akademie-Verlag.
- 1973 "Integration slawischer und nichtslawischer Sprachen an der Peripherie; ein besonderer Typ von Gerundialstrukturen", *Zeitschrift für Slawistik* 18(4): 453–470.
- 1978 "Erkundungen für eine Typologie der syntaktischen und semantischen Strukturen der Gerundien (Adverbialpartizipien) in modernen slawischen Literatursprachen", *Zeitschrift für Slawistik* 23: 229–244.
- 1982a "Kontrollprinzipien infinitiver Satzformen: Infinitiv und Gerundium (*deepričastie*) im Russischen und in anderen slavischen Sprachen", *Zeitschrift für Slawistik* 27(3): 373–411.
- 1982b "Semantičeskie i sintaksičeskie svojstva vidovogo protivopostavlenija *deepričastnyx* form" [Semantic and syntactic properties of the aspectual contrast of converbal forms], *Linguistische Arbeitsberichte (Leipzig)* 38: 57–63.

Šaripov, M. K.

- 1949 *Sintaksičeskie funkcii deepričastija deb v uzbekskom jazyke* [Syntactic functions of the converb *deb* in Uzbek]. [Unpublished Ph. D. dissertation, Leningrad.]

Šarxu, A.

- 1971 *Deepričastija i deepričastnye konstrukcii v sovremennom mongol'skom jazyke* [Converbs and converbal constructions in modern Mongolian]. [Ph. D. dissertation, Moscow.]

Sauranbaev, Nagmat T.

- 1944 *Semantika i funkcii deepričastij v kazaxskom jazyke* [Semantics and function of converbs in Kazakh]. Alma-Ata.

Savina, V. M.

- 1988 *Vremennaja sootnesennost' deepričastija i glagola v stroe predloženijskogo sovremennogo russkogo jazyka* [The temporal relation between the converb and the verb in modern Russian sentence structure]. [Unpublished Ph. D. dissertation, Moskovskij gosudarstvennyj pedagogičeskij institut im. Lenina.]

Ščerbak, Aleksandr M.

- 1960 "Deepričastie na -a ~ -ä(j) v tjurksix jazykax" [The 'converb' in -a ~ -ä(j) in Turkic languages], in: *Voprosy grammatiki. Sbornik statej k 75-letiju akad. I.I. Meščaninova*. [Questions of grammar. Collection of articles for the 75th birthday of academician I.I. Meščaninov] Moscow–Leningrad: 168–177.

Ščerbakova, A. M.

- 1960 "Pričastnye i deepričastnye oboroty v neneckom jazyke" [Participial and converbal constructions in Nenets], *Učenyje zapiski Leningradskogo pedagogičeskogo instituta im. A. I. Gercena* 167: 95–100.

Schmalstieg, William R.

- 1985 "The origin of the Lithuanian half-participle", *Lituanus* 31(1): 26–29.

Schmidt-Knäbel, Susanne

- 1971 *Die Syntax der -ant-Formen im modernen Französisch, "Adjectif verbal", "Participe présent" und "Gérondif"*. Bensberg: Schaubele.

- Schulz, Peter
1978 *Verbalnomina und Konverbien als adverbiale Ergänzungen im Alttürkeischen*. [Unpublished Ph. D. dissertation, University of Giessen.]
- Schumacher, Rolf
1977 *Untersuchungen zum Absolutiv im modernen Hindi: Ein Beitrag zur semantischen Syntax*. (Europäische Hochschulschriften 27: 1.) Frankfurt/Main: Peter Lang.
- Seidov, Ju.
1955 *Deepričastnye oboroty v sovremennom azerbajdžanskom jazyke* [Converbal constructions in modern Azerbaijani]. [Unpublished Ph. D. dissertation, Baku.]
- Serra Borneto, Carlo
1982 "Zur Übersetzung des italienischen Gerunds ins Deutsche: eine konfrontative Studie", *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 35(4): 439–453.
- Šeršadidze, I. N.
1979 "K voprosu o deepričastii na -ujyn, -jin; -matyn/-maty, -majyn v jazyke drevnetjurkskix runičeskix pamjatnikov" [On the question of converbs in -ujyn, -jin; -matyn/-maty, -majyn in the language of Old Turkic Runic monuments], *Sovetskaja Turkeologija* 1979(4): 90–93.
- Širaliyev, M. Š.
1960 "Ob etimologii deepričastnoj formy na -yban, -ibän, -uban, -üban" [On the etymology of the converbal form in -yban, -ibän, -uban, -üban], *Voprosy jazykoznanija* 9(3): 98–99.
- Škerlj, Stanko
1926 *Syntaxe du participe présent et du gérondif en veül italien*. Paris: Champion.
- Skribnik, Jelena K.
1986 "Konstrukcii s deepričastnoj zavisimoj čast'ju v burjatskom jazyke" [Constructions with a converbal dependent in Buryat], in: Ubrjatova–Litvin (eds.), 159–170.
- Smorenburg-Snel, Agnes
1981–1982 "Sobre la estructura categorial del gerundio español", *Trayecto* 5: 41–45; 6: 29–44.
- Söhnen, R.
1985 "Die Konstruktionen des Absolutivs im Sanskrit", in: Bernfried Schlerath (ed.), *Grammatische Kategorien und Geschichte*. (Akten der VII. Fachtagung der Indogermanischen Gesellschaft, Berlin 20.–25. Februar 1983.) Wiesbaden: Reichert, 478–489.
- Sokolowska, Teresa
1976 *Funkcje składniowe imiesłowów nieodmiennych w języku polskim XVII wieku* [Syntactic functions of indeclinable participles in seventeenth century Polish. (Prace Instytutu Języka Polskiego 18.) Wrocław: Wydawnictwo Polskiej Akademii Nauk.
- Soper, John David
1987 *Loan syntax in Turkic and Iranian: The verb systems of Tajik, Uzbek and Qashqay*. [Unpublished Ph. D. dissertation, UCLA.]
- Spitzer, Leo
1918 "Über den Imperativ im Romanischen. I. Der gerundiale Imperativ", in: Leo Spitzer, *Ansätze zur romanischen Syntax und Stilistik*. Halle, 181–231.
1922 "Das Gerundium als Imperativ im Spaniolischen", *Zeitschrift für Romanische Philologie* 42: 207–210.
1927 "Attributives Gerundium im Portugiesischen, Spanischen, Rumänischen und Französischen?", *Zeitschrift für französische Sprache und Literatur* 50: 464–469.
- Stassen, Leon
1985 *Comparison and universal grammar*. Oxford: Blackwell.

- Stimming, A.
1886 "Verwendung des Gerundiums und des Participiums Praesentis im Altfranzösischen", *Zeitschrift für Romanische Philologie* 10: 526–553.
- Stomeo, Paolo
1959 *Uso del participio nella coniugazione del verbo greco di Martano*. Galatina.
- Stone, Gregory Bee
1981 *Analysis of the usage of verbal periphrasis with the gerund in the educated speech of Havana*. [Unpublished Ph. D. dissertation, University of Texas at Austin.]
- Stump, Gregory T.
1985 *The semantic variability of absolute constructions*. (Synthese Language Library 25.) Dordrecht: Reidel.
- Suxanova, V. S.
1951 *Deepričastnye narečija v komi jazyke* [Converbal adverbs in Komi]. [Unpublished Ph. D. dissertation, Petrozavsk.]
- Taube, Moshe
1981 "Participe et gérondif en vieux russe", *Folia Linguistica Historica* 2(1): 125–132.
- Tereščenko, Natalija M.
1964 "Vyraženie složnoj mysli sredstvami prostogo predloženiija (na materiale neneckogo jazyka)" [The expression of complex thought by means of the simple sentence (based on Nenets data)], in: *Voprosy finno-ugorskogo jazykoznanija*. Moscow–Leningrad: 146–155.
- Thompson, Sandra A.
1983 "The English detached participial clause", in: Floria Klein-Andreu (ed.), *Discourse perspectives on syntax*. New York: Academic Press, 43–65.
- Tikkanen, Bertil
1984 "On the tense value, functions and forms of the Sanskrit gerund", *Studia Orientalia* 55: 471–497.
1987a *The Sanskrit gerund: A synchronic, diachronic and typological analysis*. (Studia Orientalia 62.) Helsinki: Finnish Oriental Society.
1987b "Finiteness and non-finiteness as parameters in clause linkage", in: Pirkko Lilius–Mirja Saari (eds.), *The Nordic languages and modern linguistics 6. Proceedings of the Sixth International Conference of Nordic and General Linguistics in Helsinki, August 18–22, 1986*. Helsinki: Helsinki University Press, 405–419.
1991 "On the syntax of Sanskrit gerund constructions: A functional approach", in: Hans Heinrich Hock (ed.), *Studies in Sanskrit syntax: A volume in honor of the centennial of Speijer's Sanskrit-Syntax (1886–1986)*. New Delhi: Motilal Banarsidass, 197–207.
- Tjukšina, L. A.
1951 *Sintaksičeskie svojstva deepričastnyx konstrukcij v sovremennom russkom jazyke* [The syntax of converbal constructions in modern Russian]. [Unpublished Ph. D. dissertation, Moscow.]
- Todorova, E.
1988 "Upotreba na deepričastijata v sávremenen bálgarski xudožestven i publicističen tekst" [The use of converbs in modern Bulgarian literary and journalistic texts], in: *Slavističen sbornik*. Sofia.
- Toločenko, P. V.
1968 "Funcțiile atributive ale gerundiului" [Attributive functions of the gerund], *Invățătorul sovietic* 1968.2.

- 1978 *Gerundiul: Natura gramaticală și funcțiile sintactice* [The gerund: its grammatical nature and syntactic functions]. Chișinău.
- Tosunian, G. B.
1987 "Pričastnyj oborot v grabare" [The participial construction in Classical Armenian (Grabar)], *Patma-banasirakan handes (Istoriko-filologičeskij žurnal)* 4: 150–157.
- Tsiang, Sarah
1988 "The discourse function of the absolutive in the Pañcatantra", *Studies in the Linguistic Sciences* 18(2): 163–181.
- Tursunov, A.
1958 *Deepričastija v sovremennom kirgizskom jazyke* [Converbs in modern Kirgiz]. [Unpublished Ph. D. dissertation, Frunze.]
- Ubrjatova, Elizaveta I.–Feliks A. Litvin (eds.)
1986 *Strukturnyje tipy sintetičeskix polipredikativnyx konstrukcij v jazykax raznyx sistem* [Structural types of synthetic multipredicate constructions in structurally diverse languages]. Novosibirsk: Nauka.
- Uuspõld, Ellen
1967 *Struktura i značenie obstojatel'stvennyx konstrukcij s central'nym slovom—glagol'noj formoj na -des, -mata, -nud (-numa), -tud (-tuna)* [Structure and meaning of adverbial constructions headed by a verb form in -des, -mata, -nud (-numa), -tud (-tuna)]. [Unpublished Ph. D. dissertation, Tartu.]
- Válckova, Nevena
1988 "Nepravilna upotreba na deepričastni konstrukcii v bálgarskija i polskija ezik" [Incorrect use of converbal constructions in Bulgarian and Polish], *Sápóstavitelno ezikoznanie* 13(4–5): 80–86.
- Van den Bussche, Henri
1988 "Typologie des constructions dites appositives", *Travaux de Linguistique* 17: 117–135.
- van der Wurff, Wim
1989 "The syntax of participial adjuncts in Eastern Bengali", *Journal of Linguistics* 25: 373–416.
- Vaseva, Iv.
1961 "Sáočnošenie po vreme meždu deepričastnoto dejstvieto na glagola-skazuemo" [The temporal relation between the converbal action and the predicate verb action], *Bálgarski ezik* 11.3.
1962 "Nepravilnosti pri upotrebata na deepričastijata" [Mistakes in the use of the converbs], *Bálgarski ezik* 12.5.
- Vasikova, L. P.
1989 "Deepričastnye konstrukcii v finno-ugorskix jazykax" [Converbal constructions in Finno-Ugrian languages], *Nyelvtudományi Közlemények* 90(1–2): 119–127.
- Velcsov, Martonné
1981 "A határozói igenéveknék egy sajátos szepere nyelvemleinkben", *Magyar Nyelv* 3: 308–315.
- Veyrenc, Jacques
1962 *Les formes concurrents du gérondif passé en russe*. Paris: Université de Paris.
- Weerenbeck, B. H. J.
1916 "Le gérondif français avec sujet sous-entendu", *Neophilologus* 1(2): 101–103.
1927 *Participe présent et gérondif*. Paris: Champion/Nimègue & Utrecht: Dekker and van de Vegt.
1937 "Qu'est-ce qu'un gérondif?" In: *Mélanges de linguistique et de philologie offerts à Jacq. van Ginneken à l'occasion du soixantième anniversaire de sa naissance*. Paris: Klincksieck, 273–282.

- Weiss, Daniel
1977 *Syntax und Semantik polnischer Partizipialkonstruktionen im Rahmen einer generativ-transformationellen Sprachbeschreibung*. (Slavica Helvetica 10.) Bern: Lang.
- Wistén, L.
1901 *Les constructions gérondives absolues dans les œuvres de Cervantès*. [Unpublished dissertation, Lund.]
- Wu, Carolina
1965 *El gerundio español: Sus equivalencias en los idiomas inglés, francés y alemán*. Trujillo, Peru: Universidad Nacional de Trujillo.
- Xosrovi, A. M.
1953 *Deepričastija v turkemenskom jazyke* [Converbs in Turkmen]. [Unpublished Ph. D. dissertation, Ašxabad.]
- Yokoyama, Olga T.
1980 "The history of gerund subject deletion in Russian", in: Catherine V. Chvany–Richard D. Brecht (eds.), *Morphosyntax in Slavic*. Columbus, OH: Slavica Publishers, 260–272.
1983 "V zaščitu zapretnyx deepričastij" [In defense of prohibited converbs], in: M. S. Flier (ed.), *American contributions to the Ninth International Congress of Slavists*. Vol. 1. Columbus, OH, 373–381.
- Yüce, Nuri
1973 *Gerundien im Türkischen: Eine morphologische und syntaktische Untersuchung*. [Unpublished dissertation, Universität Mainz.]
- Zemskaja, V. V.
1950 *K istorii deepričastij južno-russkix i sredne-russkix govorov* [On the history of converbs in southern and central Russian dialects]. [Unpublished Ph. D. dissertation, Čeljabinsk.]
- Ziletić, Zoran
1981 "Das serbokroatische Partizip mit Satzgliedfunktion und seine Entsprechungen im Deutschen", *Linguistische Arbeitsberichte (Leipzig)* 29: 31–37.

Language index

- | | |
|-------------|--|
| Akkadian | Riftin 1937 |
| Armenian | Tosunian 1987 |
| Avestan | Bartholomae 1901; Benveniste 1935 |
| Azerbaijani | Seidov 1955 |
| Bashkir | Juldašev 1976 |
| Bengali | Dan 1988; Kamilov 1981; Karpuškin 1964; Klaiman 1983; van der Wurff 1989 |
| Bulgarian | Ivanova 1976; Todorova 1988; Vălčova 1988; Vaseva 1961, 1962 |
| Buryat | Alekseev 1953; Amogolonov 1948; Skribnik 1986 |
| Chukchi | Nedjalkov–Inënlikej 1983 |
| Chuvash | Pavlov 1953 |
| Czech | Hrabě 1964 |
| Dravidian | Andronov 1981; Masica 1976; Ramarao 1971 (cf. also Tamil) |
| English | Kiss 1980; Kortmann 1988, 1991; Losada Durán 1981; Stump 1985; Thompson 1983 |
| Estonian | Uuspöld 1967 |

- Evenki Gorelova 1980a, 1980b; Konstantinova 1953
- Finno-Ugrian Alatyrev 1967; Vasikova 1989 (cf. also Estonian, Hungarian, Udmurt)
- French de Boer 1929a, 1929b; Drăghicescu 1980; Gettrup 1977; Halmøy 1981; Hausmann 1975; Henrichsen 1967; Klemenzen 1984; Lambertz 1987; Weerenbeck 1916, 1927, 1937
- Gagauz Pokrovskaja 1963
- Galician Carballo Calero 1975
- German Annema 1924; Bungarten 1976; Filipovič 1977; Jäger 1983; Jäger-Jäger 1979; Kortmann 1988; Rath 1971
- Greek Fox 1983; Haas 1956; Mirambel 1960; Stomeo 1959
- Hindi-Urdu Abbi 1984; Davison 1981, 1986; Kachru 1981; Kamilov 1981; Schumacher 1977
- Hungarian de Groot 1987; Kiss 1980; Velsov 1981
- Indo-Aryan Dwarikesh 1971; Hamp 1986; Masica 1976 (cf. also Bengali, Hindi-Urdu)
- Italian Antonini 1974–1975; Cirstea 1972; Hatcher–Musa 1970–1971; Medici 1986; Menoni 1982; Nespor 1978; Parisi–Castelfranchi 1976; Pezzuto 1921; Pusch 1976, 1980; Serra Borneto 1982; Škerlj 1926
- Karachay-Balkar Nedjalkov–Nedjalkov 1988
- Kazakh Sauranbaev 1944
- Kirgiz Tursunov 1958
- Komi Cypanov 1987; Suxanova 1951
- Korean Račkov 1958
- Kumyk Džanmavov 1967
- Latin Aalto 1949, 1951; Kooreman 1989; Lambertz 1987; Lyer 1932b; Risch 1984
- Latvian Eiche 1983
- Lithuanian Schmalstieg 1985
- Macedonian Gabinskij 1974a, 1974b
- Manchu Nedjalkov–Nedjalkov 1988
- Mari Bartens 1979; Isanbaev 1961
- Moldavian Il'jašenko 1961; Kotelnik 1971; Medveckaja 1962; Toločenko 1968, 1978
- Mongolian Kozyrev 1958; Nedjalkov–Nedjalkov 1988; Ramstedt 1903; Šarxu 1971
- Mordvin Bartens 1979
- Nenets Ščerbakova 1960; Tereščenko 1964
- Nivkh Nedjalkov–Otaina 1987; Nedjalkov–Nedjalkov 1988
- Pali Hendriksen 1944
- Permian Fokos-Fuchs 1958
- Polish Bobran 1974, 1987; Grybosiova 1975; Ivanova 1976; Jäger 1986; Jäger–Koenitz 1983; Legowska-Grybosiova 1970; Sokolowska 1976; Válcikova 1988; Weiss 1977
- Portuguese de Souza Campos 1980
- Romance Altmann de Souza Campo 1972–1973; Garner 1887–1889; Lyer 1934; Spitzer 1918, 1927 (cf. also French, Galician, Italian, Portuguese, Rumanian, Spanish)
- Rumanian Avram 1986; Caragiu 1957; Drăghicescu 1989, 1990; Edelstein 1975; Gabinski 1991; Hristea 1967 (cf. also Moldavian)
- Russian Apresjan 1983; Babby 1979; Boguslavskij 1977; Brecht 1976; Ferrel 1951; Gladney 1966; Hrabě 1964; Kovtunova 1964; Krasil'nikova 1973; Kudrjavskij 1916; Peregonceva-Grave 1955; Rappaport 1980, 1984; Rjabova 1982; Růžicka 1982a; Savina 1988; Taube 1981; Tjukšina 1951; Veyrenc 1962; Yokoyama 1980, 1983; Zemskaja 1950.

- Sanskrit Deshpande 1981; Gonda 1967; Gune 1913; Hock 1987; Jeffers–Kantor 1981; Renou 1935, 1940; Rocher 1980; Söhnen 1985; Tikkanen 1984, 1987a, 1991; Tsiang 1988
- Serbo-Croatian Jacobsen 1981; Ziletić 1981
- Shor Nevskaja 1988
- Slavic Höck 1979; Růžicka 1963, 1973, 1978, 1982a (cf. Bulgarian, Czech, Macedonian, Polish, Russian, Serbo-Croatian, Ukrainian)
- Spanish Bobes Naves 1975; Bouzet 1953; Caro 1870; Chmeliček 1930; De La Peña 1889; Diaz Bautista 1986; Jäger–Jäger 1979; Jiménez Vazquez 1981; Lajmannovich 1968; Losada Duran 1981; Lyer 1932a; Mozos Mocha 1973, 1974; Ozete 1983; Reese 1991; Smorenburg–Snel 1981–1982; Stone 1980; Wistén 1901; Wu 1965
- Tajik Perry 1979
- Tamil Lindholm 1975
- Turkic Čeremisina–Šamina 1986; Džanmavov 1967; Johanson 1975, 1988; Juldašev 1977; Kononov 1965; Ščerbak 1960; Schulz 1978; Šervašidze 1979; Širaliev 1960 (cf. also Azerbaijani, Bashkir, Chuvash, Gagauz, Karachay-Balkar, Kazakh, Kirgiz, Kumyk, Shor, Turkish, Turkmen, Tuva, Uzbek, Yakut)
- Turkish Brendemoen–Csató 1987; Johanson 1990; Schulz 1978; Yüce 1973
- Turkmen Xosrovi 1953
- Tuva Babuškin 1959
- Udmurt Perevoščikov 1959; Bartens 1979
- Ukrainian Bovtruk 1956
- Uzbek Askarova 1950; Perry 1979; Šaripov 1949; Soper 1987
- Yakut Korkina 1985
- General Bickel 1991; Brodskaja 1980; Čeremisina 1977, 1980; Dasgupta 1986; Haiman 1985; König–van der Auwera 1990; Kortmann–König 1992; Masica 1976; Meščaninov 1945; I. Nedjalkov in press; V. Nedjalkov 1990; Pulgram 1987; Stassen 1985

Index of authors

- Akanni, I. 140
 Akatsuka, N. 484
 Akinnaso, F. N. 147
 Aksu-Koç, A. 335, 365, 366, 369
 Alekseev, M. E. 439
 Allchin, B. 525
 Allchin, R. 525
 Alpatov, V. 26, 58, 469, 475–477
 Ambrazas, V. 105, 131
 Apresjan, J. D. 59, 91, 108, 109
 Atlas, J. D. 224
 Austin, P. 2, 19
 Avanesov, R. I. 246, 277
 Awobuluyi, O. 152
 Awoyale, Y. 137
- Babuškin, G. 377, 393, 394, 396, 402, 403, 408
 Bäcklund, I. 201, 211, 231
 Bamgboṣe, A. 137, 148, 149
 Barnetovŝ, V. 241
 Barsov, A. 267, 271, 278
 Bashir, E. 490, 494, 522
 Baskakov, A. 375, 394
 Benzing, J. 46, 336
 Berent, G. B. 204, 211, 213, 214, 232
 Bergelson, M. B. 11, 48, 342, 393, 407, 458
 Berger, H. 487, 489, 490, 493, 495, 497, 521, 524
 Berman, R. 350, 364, 369
 Bertagaev, T. 109
 Bertrais-Charrier, Fr. J. 153
 Beukema, F. 208, 210, 232
 Biber, D. 192
 Bickel, B. 22, 48, 155, 172, 327
 Birjukovič, R. M. 394
 Bisang, W. 37, 40, 41, 43, 44, 49, 137, 139, 145, 149, 152–154, 182, 191, 471
 Bobrovnikov, A. , 100
 Boguslavskij, I. M. 57, 59, 61, 75, 77, 80, 108, 109, 251
 Bondarko, A. V. 251, 269, 277
 Bopp, F. 49
 Borgojakova, T. 378
- Borkovskij, V. 103, 247, 264, 265, 270, 271, 277
 Bradshaw, J. 176
 Brecht, R. D. 172
 Brockelmann, C. 48
 Brodskaja, L. 111, 462
 Bromley, H. M. 180
 Bruce, L. 177–180
 Buchholz, O. 49
 Buddruss, G. 487
 Bulaxovskij, L. A. 255, 267, 278
 Bungarten, T. 57, 214
 Buttler, D. et al. 277
 Bybee, J. 9, 43, 44, 49
 Byrne, F. 137
- Carlson, G. N. 81
 Carlson, R. 391
 Castelfranchi, C. 59, 60
 Čeremisina, 3, 35, 97, 98, 103, 105, 109, 111, 375–378, 391, 392, 395, 403, 407
 Chafe, W. 228, 229
 Chao, Y. R. 146, 150
 Čkadua, L. P. 110
 Clark, M. 137
 Cole, P. 373, 374,
 Comrie, B. 91, 230, 341, 406, 439
 Crowley, T. 137
 Csató, E. 332, 340, 342
- Dahl, Ö. 43, 44, 49
 Davison, A. 57, 59, 499, 510, 514, 524
 Déchaine, R.-M. 137
 De Groot, C. 285, 309, 310
 Delancey, S. 173
 Delger-ool, A. K. 377, 394, 396
 Dempwolff, 147, 148, 151, 153, 176
 Deny, J. 332, 357, 358, 363, 364
 Dešeriev, J. 131
 Dezső, L. 286
 Dik, S. 231, 340
 Dmitriev, N. 98, 375, 377, 402
 Doerfer, G. 334, 337

- Durie, M. 137
 Dvořák, E. 278
 Džanmavov, J. D. 7, 15, 40, 41, 48, 106, 321

 Ebert, K. H. 40, 153, 435
 Ediskun, H. 357–359
 Efremov, N. 111, 114, 341, 376, 377, 378
 Einarsson, S. 192
 É. Kiss, K. 285, 309
 Ekundayo, S. A. 147
 Emonds, J. 204

 Fel'dman, N. I. 476
 Filipović, N. 102
 Filppula, M. 204
 Fiedler, W. 49
 Foley, W. 23, 25, 26, 70, 137, 179, 180, 221,
 232, 324, 327, 341, 374, 404, 470, 506, 510
 Forsyth, J. 245
 Fortecue, M. 5
 Franklin, K. J. 385
 Fremont, A. 487, 518
 Friederich, W. 207, 209
 Fromm, H. 78

 Gabain, A. von, 336, 337, 342, 349
 Gabelentz, G. von der, 342
 Gadžiev, M. 48
 Gadžieva, N. 375, 378, 391, 393, 395, 402
 Gak, V. 131
 Genetti, C. 374
 George, I. 137
 Givón, T. 19, 22, 23, 25, 37, 137, 224, 228,
 242, 245, 262
 Gordon, E. 129
 Gorelova, L. 103, 111, 114, 375, 462
 Greenbaum, S. 203
 Greenberg, J. H. 9
 Grevisse, M. 30, 39, 40
 Grice, H. P. 68, 252
 Grierson, G. A. 46
 Grønbech, K. 142, 176, 337
 Grybosowa, A. 275
 Guzev, V. G. 342

 Haiman, J. 3, 14, 16, 24, 29, 48, 49, 155, 342,
 367, 368, 374, 375, 385
 Hale, K. L. 48

 Halliday, M. 217, 218, 232
 Halmøy, J.-O. 11, 16, 30–35, 57, 59, 62, 63,
 65–68, 70–72, 74, 76–80, 83, 85, 89, 92
 Hangin, J. G. 46
 Hannay, M. 310
 Hanser, O. 328, 341, 342, 391
 Haspelmath, M. 9, 10, 13, 28, 38, 39, 41, 43,
 45, 46, 48, 58, 91, 137, 210, 231, 239, 258,
 259, 283, 421, 438, 444, 454, 467, 489
 Havránek, B. 118, 128
 Hengeveld, K. 43
 Hibiya, J. 183, 374, 474
 Hinds, J. 161, 162, 182, 484
 Hock, H. H. 494
 Holland, G. B. 27
 Hook, P. E. 496, 501
 Hopper, P. J. 144, 245, 353
 Horváth, L. 295
 Huang, C. T. J. 143, 182
 Huddleston, R. 45

 Icković, V. A. 256, 257, 259
 Ihms, H. 196
 Imart, G. 329, 340
 Inënlíkej, P. 104
 Inone, K. 484
 Isačenko, A. V. 248, 276
 Isanbaev, N. 107
 Isxakov, F. 375, 377, 378, 393, 396, 400, 402
 Ivanov, S. I. 358
 Iwasaki, S. 374

 Jacobs, J. 87, 92
 Jacobsen, W. 374, 375
 Jakobson, R. 97
 Jansen, B. 137
 Jansky, H. 357, 358, 359
 Jaxontov, S. 44, 302
 Jedlička, A. 118, 128
 Jespersen, O. 198, 200, 204, 221, 231
 Johanson, L. 58, 155, 316, 321, 326, 327, 331,
 332, 334–337, 340–342, 359, 418
 Jorden, E. 155, 162
 Joseph, B. 137
 Juidášev, A. 98–100, 109, 330, 342, 375, 377,
 402, 501, 518, 522

 Kaburaki, E. 32
 Kachru, Y. 16, 57, 59, 60, 65, 72, 91

- Kalectaca, M. 114
 Kansanskaja, V. 103
 Karlsson, F. 92
 Katanov, N. 377, 378, 396, 402, 403
 Keenan, E. 208
 Kibrik, A. 11, 48, 99, 342, 398, 405, 458
 Kissling, H.-J. 337, 357, 358
 Klaiman, M. H. 499
 Kölver, V. 137
 König, E. 3, 27, 38, 46, 61, 67, 76, 92, 137,
 190, 196, 205, 221, 230, 240, 249, 250, 258,
 263, 332, 335, 436, 437, 467, 470, 495
 Kolesnikova, V. D. 462
 Kononov, A. 100, 327, 342, 353, 356, 357,
 358, 375, 376, 402
 Konstantinova, O. 107, 116, 118, 121, 126
 Koopman, H. 137
 Koptjevskaja-Tamm, M. 5
 Korkina, E. 99, 116, 119
 Kormušin, I. V. 336
 Kornai, A. 286
 Korotaeva, È. 271
 Kortmann, B. 4, 14, 28–30, 32–34, 36, 38, 48,
 49, 57, 59, 62, 67, 70, 72, 74, 76, 82–84,
 89, 172, 190, 192, 194, 210, 217, 219, 221,
 223, 224, 226, 229, 230, 437
 Kovtunova, I. 111
 Krasil'nikova, E. 100
 Krejnovič, E. 127
 Krueger, J. R. 46, 49, 142
 Krylova, I. 129
 Küntay, A. 369
 Kuhn, W. 137
 Kuno, S. 12, 26, 32, 57, 90, 161, 165, 182,
 470, 474
 Kurganov, N. 267, 271, 278
 Kurz, J. 275
 Kuznecov, P. S. 247, 265, 270, 277
 Kuznekov, P. I. 356
 Kwee, J. B. 524
 Laakso, P. 524
 Lafitte, P. 4
 Lambdin, T. O. 5
 Lawal, N. 172
 Legendre, G. 30, 31
 Lehmann, C. 5, 76, 141, 156–160, 203, 470
 Levinson, S. 70, 232
 Lewis, G. L. 352, 357, 358, 375, 402
 Li, C. 137, 146, 261, 277, 360
 Lomonosov, M. V. 30, 249, 265–267, 271, 275
 Longacre, R. E. 25, 48, 367, 374, 394, 522
 Lopatin, V. V. 11
 Lord, C. 137, 140, 151, 152
 Lorimer, D. 487, 493, 498, 499, 501, 502,
 509–511, 522
 Lynch, J. 374
 MacDonald, L. 20, 21
 Macdonnell, A. 46
 MacLuhan, M. 182
 Mann, W. C. 218
 Martin, S. E. 49, 475–477, 481, 483
 Masica, C. 3, 128, 137, 171, 190–192
 Maslov, J. 44
 Matisoff, J. 137, 173
 McCarthy, J. 48
 McCawley, J. D. 193, 204
 McGloin, N. H. 484
 Mel'čuk, I. A. 260
 Menovščikov, G. 113, 114, 118, 121–123,
 125–127
 Meščaninov, I. I. 3, 4
 Meyer, P. G. 226, 230
 Michaelis, S. 47
 Mirambel, A. 45, 49
 Mithun, M. 391
 Mohanan, K. P. 36, 209, 210
 Moor, M. 438
 Morin, Y.-C. 490, 503, 521
 Müller-Bardey, T. 18, 47
 Mundy, C. S. 341
 Munro, P. 29, 41, 42, 367, 368, 374, 385
 Musteikis, K. 113
 Muysken, P. 137
 Myhill, J. 183, 374, 474
 Narteyev, N. 391
 Nedjalkov, I. V. 3, 6, 28, 46, 75, 82, 91, 445,
 462
 Nedjalkov, V. P. 3, 4, 7, 10, 11, 23, 44, 46, 48,
 58, 59, 91, 97, 104, 156, 172, 182,
 190–192, 195, 198, 215, 217, 218, 220, 226,
 230, 239, 245, 250, 262, 265, 302, 374, 445,
 462, 467, 522

- Needleman, R. 137
 Nichols, J. 18, 349, 374
- Oktábec, V. 127
 Olson, M. 404
 Ono, T. 183
 Öre, Y. 147, 149, 152
 Oswalt, R. 112
 Otaina, G. 97, 127
 Owensby, L. 137
 Oyelaran, O. 137, 140, 147, 149, 152
- Padučeva, E. V. 261, 383
 Pagliuca, W. 9
 Pal'mbax, A. 375, 377, 378, 393, 396, 400, 402
 Panfilov, V. 101, 107, 127
 Parisi, D. 59, 60
 Pasch, R. 92
 Pawley, A. 137
 Payne, T. E. 22
 Peregonceva-Grave, L. 113
 Perevoščikov, P. N. 8, 14, 15, 40, 107
 Perlmutter, D. M. 49
 Perry, J. 334
 Peškovskij, 87
 Pesot, J. 487, 503
 Perkins, R. D. 9
 Pilhofer, G. 48
 Pisarkowa, K. 275
 Plank, F. 18
 Pocluevskij, A. P. 375, 402
 Podlesskaya, V. 26, 58, 471, 484
 Polinsky, M. 408
 Poppe, N. 167, 170, 340
 Potebnja, A. 278
 Poutsma, H. 220
 Premper, W. 182
 Prijatkina, A. F. 269, 270
 Pritsak, O. 337
 Pullum, G. 173, 183, 231
 Pusch, L. 8, 11, 57, 59, 62, 65, 66, 76, 91, 231
- Quinn, C. 177
 Quirk, R. et al. 39, 40, 48, 196–198, 200, 201, 207, 230, 231, 232
- Račkov, G. 100, 126
 Ramsey, V. 228
- Ramstedt, G. J. 46, 49, 97
 Rappaport, G. C. 46, 57, 59, 76, 82, 85, 87, 88, 92, 172, 258, 260, 276, 277
 Rath, R. 57
 Raxtilin, V. 104
 Redhouse, J. W. 357, 358
 Reese, S. 11, 27, 43, 57, 81, 82
 Reesink, G. 24
 Reichl, K. 334
 Riemsdijk, H. van, 204
 Roberts, J. R. 24, 25
 Ross, J. R. 16, 335
 Rowlands, E. C. 37, 149
 Rozental, D. 276, 277, 278
 Růžicka, R. 76, 251, 255, 258, 260, 261, 270, 276, 524
- Sakkakibara, H. 204
 Šamina, L. 105, 328, 331, 377, 378, 393, 395, 396, 398, 400, 402, 408
 Sanžeev, G. 97
 Sat, Š. 378, 391, 394, 395, 400, 401
 Savina, V. M. 277
 Saxena, A. 40, 41
 Scancarelli, J. 25
 Scheurweghs, G. 212
 Schiller, E. 137
 Schlegel, A. W. von, 46
 Schulz, P. 318, 321, 338, 501, 510
 Schumacher, R. 30, 32, 33, 35, 46
 Scott, G. 114, 342
 Sebba, M. 137
 Seiler, H. 182
 Shibatani, M. 161, 483
 Skribnik, E. 111, 119, 120, 123, 375, 378
 Slavaty, 278
 Slobin, D. 58, 328, 335, 342, 350, 351, 364, 365
 Šmeleva, T. 252
 Sokołowska, T. 275, 277
 Soper, J. D. 334
 Sperber, D. 144
 Stahlke, H. 137, 151
 Stassen, L. 22, 23, 190, 205–207, 220, 221, 432
 Stecenko, A. 118
 Steever, S. 137, 156–158, 160, 173–175, 499, 519

- Street, J. C. 166–171
 Stump, G. 57, 200, 203, 231
 Švedova, N. J. 11, 239, 256, 257, 393
 Sweet, H. 196
 Swift, L. B. 318, 341

 Takami, K. 484
 Talmy, L. 245
 Tamori, I. 470, 472, 473
 Tawa, W. 484
 Tekin, T. 342, 375
 Thompson, L. 139
 Thompson, S. A. 48, 137, 144, 146, 191, 218, 219, 228, 261, 360, 374, 375, 506
 Thurman, R. 48
 Tiffou, É. 487, 490, 500, 503, 521
 Tikkanen, B. 9, 15, 34, 41, 46, 49, 72, 90, 487, 488, 493–495, 497, 501–503, 505–508, 510, 515–519
 Trávníček, F. 128
 Trumpp, E. 518

 Ubrjatova, E. 375, 391
 Underhill, R. 352, 356–358, 375, 384
 Uslar, P. K. 434, 438
 Uuspóld, E. 123, 129
 Váľčková, N. 30, 34, 36

 van der Auwera, J. 3, 27, 46, 76, 137, 190, 196, 197, 205, 221, 230, 231, 240, 249, 250, 258, 263, 332, 335, 470, 495

 Van Valin, R. D. 23, 25, 70, 137, 179, 224, 232, 327, 341, 374, 404, 407, 470, 506, 510
 Vardul', I. F. 477
 Vaxtin, N. B. 113, 114, 122, 126
 Vichit-Vadakan, R. 152
 Vietze, H.-P. 166, 167, 168, 170, 171
 Visser, F. 204, 207, 209, 214

 Weber, D. J. 2, 9, 29
 Weiss, D. 35, 57, 173, 183, 255, 258, 260, 263, 268, 273, 277, 278
 Wierzbicka, A. 260
 Wiesemann, U. 374
 Wilkins, D. 384
 Williams, E. 18
 Wilson, D. 144
 Woodbury, A. C. 374
 Wurm, S. A. 182, 183, 333, 337

 Xolodovič, A. 97, 102

 Yamaguchi, S. F. 162, 163
 Yokoyama, O. 111, 258, 266, 268, 278
 Yüce, N. 316, 339, 358

 Zahn, H. 147, 149–153
 Zakiev, M. 109
 Zandvoort, R. W. 45
 Zarubin, I. I. 487
 Zwicky, A. 137

Index of subjects

- ablative 317, 517
- ablativus absolutus* 27, 265
- absolute construction 27–28, 46, 76, 102, 137, 189, 211–214, 252, 262–268, 275, 290, 314, 496–497
- absolutive 46
- abstemperality 319
- abstract noun 431
- abstract predicate 59
- accompanying circumstance 222, 223, 251, 502
- acquisition of language 71
- actant 97
 - clausal – 97
 - first – 314
- active 239, 296–297, 303
- addition 216, 222, 223, 504
- addressive/nonaddressive form 467, 475, 476
- adjective 4, 18, 117, 239, 242, 465, 466–467
 - qualitative – 249
 - verbal – 3, 4, 18, 19
- adjective phrase
 - copredicative – 18
- adjoined relative clause 48
- adjunct 97
 - free – 29, 48, 62, 79, 137, 189
 - predicative – 290, 294–295
 - strong – 81
 - weak – 81
- adposition 37, 38, 42, 64, 288
- adverb 4
 - causal – 427
 - conjunctive – 64, 75–77, 316
 - deictic – 71
 - epistemic – 193
 - manner – 198, 288
 - of frequency 78, 79
 - sentence – 86–88
 - verbal – 3–5
- adverbial 7–8, 58, 97, 98
 - clause 78, 189, 394
 - phrase 293
 - subordination 239
 - time – 65
- adversative interpretation 71, 84
- affix 9
- agent 259
 - of the passive 255
 - phrase 296
- agglutinative
 - language 138, 283
 - morphology 365, 415, 489
- agreement 4, 5, 17, 19, 27, 112, 113, 115–116, 116, 116–123, 117, 123, 377, 379, 401, 442, 443, 488
- Aktionsart 62, 70, 81–83, 359
- allative 28, 448
- ambiguity 273, 274
- anaphora
 - backwards pronominal – 12, 14
- animacy 239
- anteriority 71, 88, 107, 129, 130, 166–168, 176, 176–177, 203, 216, 218, 220, 223, 240, 245, 320, 321, 334, 446, 446–449, 454, 460, 469, 502
 - immediate – 168, 449, 453
- aorist 415, 416
- applicative 41
 - instrumental – 42
 - periphrastic – 45
- apposition
 - partitive – 214
- appositive 48
- archaism 191, 212, 265, 267, 337
- areal
 - phenomena 171
 - typology 517
- argument 4
- aspect 5, 62, 68, 78–81, 80, 100, 139, 141, 244–250, 442
- asymmetry 25, 137, 171, 175, 176, 239
- asyndesis 273
- asyndetic coordination 98
- attention flow 366
- attractor position 144
- attribute 97
- augmentation 204, 211, 213, 222

- interpretative – 60
 - of adjuncts and absolutes 203
- background 85, 92
 - assumption 70, 71
- benefactive 150–151, 156, 159, 165, 170, 421
 - argument 45
- bleaching
 - semantic – 42
- borrowing 176, 204, 240, 250, 274, 277, 334, 418, 423
- c-command 14, 25
- case marking
 - affixes 78
 - ergative – 13
- cataphora, pronominal – 12, 25
- causal relation 67–69, 71, 81, 82, 84, 85, 109, 142, 154, 157, 161, 203, 216–218, 221, 223, 316, 319, 353, 419, 470, 475
- causality 222, 226
- causative
 - construction 115, 172
 - mood 5
 - verb 145, 152, 179, 180
- causativity 156, 159, 166
- chaining 329, 394
- change, semantic 71
- child language 349–368
- children's errors 365–367
- circonstant 242
- circumfix 9, 522
- circumstance 287, 293, 294, 298
 - attendant – 65–67, 69, 70, 73, 81, 83, 84, 88, 460
- circumstantial relation 57, 58, 64, 67, 71, 72
- clause 322
- clause chaining 7, 20–27, 21–23, 48, 349
 - anterior – 22
 - consecutive – 220
 - posterior – 22
- clause
 - purpose – 28
 - adverbial – 4
 - complement – 28, 38
 - definition of – 11
 - relative – 195
- cleft construction 16
- clefting 87, 472
- co-text 61, 206, 209
- combination of converbal and nonconverbal functions 104
- communicative dynamics 321
- comparative
 - interpretation 72, 76, 253, 286, 203
- conditional – 481
- comparison 430
- complement 157, 199, 204, 287, 295, 316, 400, 421, 425–426, 489
 - clause 317, 445, 457
- participial – 198
- complementation 7, 195
- complementizer 4, 152, 153, 489, 494
- complexity, cognitive 70, 203
- compound 289, 290
- compound verb 175
- concession 97, 107, 155, 203, 216, 223, 470
- concessive
 - conditional 68, 77, 160, 163
 - interpretation 61, 67–69, 72, 77, 81, 82, 84, 85, 158, 162, 166, 436, 466, 481, 489
- concessiveness 61, 70
- concessivity 167
- condensation of events 154
- condition 107, 155, 216, 223, 319, 398, 460
- conditional clause, asyndetic – 47
- conditional form 4
- conditional interpretation 59, 61, 67, 68, 78–81, 88, 140, 153, 156, 157, 160, 162, 163, 166, 167, 247, 450, 489
- counterfactual – 65
- simple – 65
- conditionality 160
- conjunction 64, 75, 76, 100–101, 152, 153, 176, 254, 262, 264, 268, 393, 398, 400, 482
 - adverbial – 4, 189, 192, 229
 - adversative – 478
 - causal – 41
 - comparative – 268
 - conditional – 253, 478
 - coordinating – 73, 517
 - hypotactic – 271, 275
 - logical – 473
 - paratactic – 270, 275
 - secondary – 269

- subordinating – 12, 38–41, 99, 200, 313, 489, 517
- conjunctive
 - interpretation 171
 - verb 145, 152–154, 153, 160, 161, 166, 170, 179
- conjuncts 64, 75, 76
- consequential interpretation 84
- construction 11
 - representative – 477
- contact 173, 175, 334, 519
- context 73
- contextual factor 58
- continuative form 160–162
- continuous 165
- continuum 182
- contrast 203, 216, 223
- control 18, 19, 28, 29–37, 258–262, 318–319, 318, 431–433, 458–459
 - subject – 29–32, 332
 - backwards – 12, 14, 15
 - nonsubject – 32–37
- converb
 - of anteriority 75
 - of posteriority 75
 - proper 11, 98, 192, 198, 199
 - segment 313
 - anterior – 44, 417, 423, 493, 502
 - aorist – 422–425, 426
 - canonical – 97, 102
 - causal – 431
 - circumstantial – 300
 - conditional – 126, 466, 478
 - conjoining – 402–404
 - conjunctive – 11, 99, 154, 155, 160, 192, 198, 199, 218
 - ontextual – 19, 58, 106, 108–109, 128–130, 154, 156, 225, 226, 417–426, 446, 453–457, 467, 471–474, 522
 - coordinative – 102, 109–110, 154, 192, 220
 - definition of – 3, 26, 141
 - detached – 85, 264
 - different-subject – 10, 29, 110, 112, 116
 - explicit-subject – 10
 - free-subject – 10
 - futurate – 126–128
 - gradulative – 430
 - immediate anterior – 429
 - imperfective – 124, 251, 293, 416, 417
 - implicit-subject – 10
 - manner – 300, 430 – 431
 - narrative – 58, 74, 90, 91, 106, 109–110, 128–130, 154, 155, 217
 - perfective – 44, 293
 - periphrastic – 9
 - posterior – 416, 428–429
 - presential – 125
 - preterital – 125–126
 - primary – 465
 - propulsive – 330
 - purposive – 28, 430–431
 - quasi – – 102–104, 128–130
 - same-subject – 10, 29, 110, 112, 116
 - secondary – 465
 - simultaneous – 493, 502, 518
 - specialized – 58, 64, 106, 107–108, 154, 156, 427–431, 446, 467, 506
 - temporal – 107, 427
 - varying-subject – 10, 110, 116, 226, 445
- converbal clause 11
- conversation maxim 252
- converseness 70
- cool language 143
- coordinate 155, 192, 322, 504, 507
- Coordinate Structure Constraint 16
- coordination 8, 13, 21, 26, 98–99, 155, 160, 171, 172, 176, 182, 255–257, 316, 322, 393, 515
- coordinative 58, 106, 146, 506
- copredication 18, 231, 242, 419
- copredicative 19, 27, 317, 422, 493
- copula 304, 315, 419, 432, 465, 466–467, 475–476
 - existential – 43
 - locative – 43
 - nominal – 43
 - zero – 273
- corpus-based study 32
- cosubordination 23, 23–27, 322, 327
- counterfactual 478
- coverb 37, 145, 150–151, 159, 161, 165, 166, 170, 172, 179, 180
- dative 113, 123, 150–151, 156, 165, 170, 317, 377, 390, 421

- absolute – 27, 249, 264, 266, 268, 273, 274
 - participant 33
- deeppricastie* 3, 23, 46, 97, 172, 239, 349
- definiteness 284, 291
- deletion, anaphoric – 397
- dependent 26
- dependent-marking 41, 42
- depictive/nondepictive 191
- deranking
 - absolute – 205, 263
 - conditional – 205, 263
- derivation 4
- desemanticization 403
- desententialization 5
- detachment 87, 189, 198, 199, 242, 258
- diachronic origin 17
- diachrony 325–327, 335–337, 516–517
- diathesis 144
- different-subject 110, 263, 314, 350, 468
 - construction 123
- direct/indirect speech 170, 401, 402
- direction 150, 151–152
- directional 421
 - verb 145, 149, 158, 161, 164, 166, 169, 179, 180
- discontinuity 12, 13, 304
- discourse pragmatic 228, 505–513
- dual 67
- durative 108, 159, 169, 170, 353
- durativity 315, 450
- economy 20, 36, 274
- ellipsis 264, 273, 274, 510
- embedding 8, 26, 255–257, 257, 523
- empathy 32
- empty subject 48
- enrichment 59, 73, 83, 85
 - interpretative – 71
- equative 317
- equi-NP deletion 472
- ergativity 488–489
- Eurocentrism 1, 321–332
- Europeanization 331–332
- exemplification 223
- experiencer 31, 33, 209, 255, 258, 425, 496
 - construction 31
 - accusative – 33
 - dative – 33
- experiential 169
- extraction 12, 16
- factual 62, 68, 70, 73, 78, 82
 - context 61, 61
- factuality 77
- figure/ground 245
- finite 4, 26, 97, 160, 273, 322, 340, 490–491, 519
 - verb 115
- finiteness 175, 478, 518, 519
- focus 73, 85, 86, 89, 90, 198, 247, 285, 286, 292, 298–300, 303
 - particle 15, 60, 61, 77, 86–88, 199, 292, 481, 515
 - position 16
- focusability 12, 15–16, 85–91, 323–324, 504, 508, 513–515
- frequency 20, 44, 103, 190–192, 191, 192, 195, 239, 255, 262
 - adverbial 62
- functional
 - explanation 404
 - motivation 11
- future 416
 - immediate – 170
- generic interpretation 78–80
- genitive absolute 265
- gerondif* 2, 31, 45, 62
- gerund 2, 5, 23, 45, 97, 103, 104, 106, 120, 137, 195, 276, 466
 - adverbial – 199
 - half- – 196
- gerundio* 45, 48, 62
- gerundive 45
- gerundivum* 45
- Gesamtbedeutung 59
- gradient 203, 223
- grammaticalization 9, 11, 29, 36, 37–5, 68, 78, 144–146, 153, 154, 172, 230, 232, 254, 316, 349–368, 431, 432, 434–437, 434, 476
- habitual interpretation 78
- habituality 125
- head-marking 41, 42
- hierarchy
 - of grammatical functions 208

- accessibility – 208
- implicational – 207
- pragmatic – 208
- honorification 472, 477
- hortative 416
- hyponymy 70
- hypotaxis 335
- hypothetical 61, 62, 68, 70, 80
- iconicity 75, 84, 155, 221, 224, 245, 327, 347
- iconicity, tense – 14
- idiom 290, 295, 309
- illocutionary level 36
- imaginativus* 176
- imperative 47, 122, 123, 126, 401, 416, 455, 475, 477, 481
- imperfective 49, 124, 244, 245, 291, 302, 390, 416, 434
- impersonal 261, 273, 387
- implicit subject 9, 11, 14, 28, 29, 32, 48, 200, 208, 252, 255, 258, 261, 274
- incorporation, object – 290
- indeclinable adverbial participle 239
- indeterminacy 137, 144, 171, 176, 321
- indirect object 31
- indirect speech 170
- individual-level predicate 81
- inference, pragmatic – 30, 32, 318
- infinitive 28, 78, 97, 103, 104–106, 157, 160, 194, 195, 252, 253, 255, 261, 287, 421, 457, 466, 489, 493, 503, 517
 - personal – 5
- inflection 4
- inflectional language 138
- informativeness 61, 70, 85, 203, 215, 223–226
- ingressive 165
- instrumental interpretation 42, 66–68, 78, 82–84, 216, 223, 251, 317, 319, 334, 359, 418, 450, 470, 517
- interruption 97
- intonation 73, 75, 198, 200, 264
- intraterminal 315, 319, 320, 334
- irrealis 28
- isolating language 37, 138
- iterative 124
- juxtaposition 176, 251
 - synactic – 146, 175, 178, 179
- lexical – 148, 158, 161, 163, 166, 168, 175, 179
- Latinocentrism 1
- Least Effort, Principle of 224
- lexicalization 66, 145, 154, 243, 249, 315, 501
- limitative 319
- local relation 72
- location 43
- locative 150, 151, 317, 517
- manner relation/interpretation 65, 66, 84, 109, 216, 223, 287, 293, 294, 298, 299–300, 359, 418, 424, 469, 470
- markedness 113, 154
- masdar 4, 7, 17, 45, 48, 377, 415, 416
- masdar-case forms 377
- mass noun 388
- material implication 65, 68
- materialist view 68
- means relation/interpretation 319
- medial form 130
- medial verb 20–27, 48, 327
 - definition of – 26
- modal 65, 84
- modal auxiliary 78–81
- modal verb 62
- modality 78–81
- modifier 7
 - adnominal – 4
 - adverbial – 4
- momentariness 306–307
- mood 4, 5, 20, 68, 78–81, 87, 90, 139, 141, 194, 291
 - indicative – 26
 - subjunctive – 126
 - subordinate – 26
- narrative interpretation 146, 156, 161, 171
- necessitative 165
- negation 82, 86, 88, 165, 174, 178, 199, 337–339, 389, 506, 507, 510–513
 - contrastive – 511
 - focusing – 16, 87
- negative 178, 304, 423, 436, 459–461
- nexus 231
 - object – 196, 240, 243
- nonaddressive 476

- nonfinite 4, 7, 26, 189, 239, 255, 415, 491–493
 noun 4
 Novosibirsk typological school 375
- optative 401, 416, 437
 orientation point 324
- paradigm
 inflectional – 4
 syntactic – 144
 paradigmatic relation 67
 parataxis 71, 335
 part-whole relationship 189, 212, 258, 332, 458, 459
participation 176
 participium conjunctum 17, 46, 265
 participle 3–5, 19, 27, 97, 102–106, 117, 118, 195, 239–240, 245, 249, 255, 257, 261, 377, 416, 489, 493, 503, 517
 adjoined – 231
 adverbial – 2, 5, 23, 45, 46, 137, 189–237, 239–240, 283, 287, 296
 appositive – 103
 co-predicative – 17, 17–20, 27, 240
 conjunctive – 5, 23, 46, 137, 494, 508, 510, 511, 513, 516
 detached – 75
 dominant – 231
 indeclinable – 2, 46
 passive – 243
 past – 189, 287
 perfect – 189
 present – 45, 189, 287
 semi- – 113, 118, 130
- particles 9
Partizipation 144, 182
 passive 91, 194, 209, 239, 259, 277, 296–297, 297, 303, 381
 perfect 6, 43, 44, 159, 164, 194, 390, 416, 421, 434
 perfective 80, 159, 169, 244, 245, 302, 447
 – aspect 291
 – marker 299
 periphrasis 44
 aspectual – 43
 periphrastic construction 301–308, 305–308
 periphrastic tense-aspect 434
 person-number
 – agreement 141, 176
 – inflection 5, 6
- phrase 11
 pivot 488
 pragmatic – 232
 plot advancement 327–328
 polarity 90
 politeness 469
 polypredicative construction 375, 378, 392
 polysemy 59–64, 91
 possession 122, 123, 204, 443, 445
 inalienable – 386
 reflexive – 443
 possessive 112, 116, 120, 123, 432, 458
 – affix 78
 – construction 5
 – pronoun 206, 208, 211
 possessor 34, 196, 318, 332, 382
 posteriority 88, 107, 203, 216, 218, 220, 223, 250, 277, 320, 446, 447, 452–453, 460
 postposition 316, 400, 420, 428, 435–437, 476, 482, 495
 postterminal 315, 319, 320
 postverb 315
 precedence 97, 124, 125, 131
 predicate 11
 predication 18
 secondary – 18, 197, 239
 prefix 9, 42
 preposition 62, 200, 254
 prescriptivism 30, 32, 111, 214, 258, 259, 268, 277
 presupposition 69
 preverb 16
 PRO 48
 progressive 43, 158, 159, 164, 194
 progressive 434, 470
 prohibitive 416
 pronoun
 empty – 143
 interrogative – 71, 481, 489
 reflexive – 111, 261
 propositional logic 68
 provisional 466
 psycholinguistics 335
 punctual 352
 purpose 88, 171, 216, 223, 251, 319, 421, 457–458, 460

- purposive clause 65, 400–402, 435
- purposive relation/interpretation 58, 67, 72, 78, 82, 316, 421, 466
- quasi-coordination 376–394, 418
- question 324, 507, 508
 - polar, yes/no – 15, 199, 285
- question words 285
- quotation 154
- raising, subject-to-object – 197
- realis 176
- recipient 33
- reciprocal 91
- reduction 42
- reduplication 9, 418, 454
- reference tracking 331
- reflexive 91, 112, 120, 208, 305, 376, 445
- relatedness 67–70
 - of free adjuncts 206
- relational grammar 31
- relative clause 18, 201, 216, 218
 - sentential – 231
- relevance 85, 144
- representative 466
- restrictiveness 12, 15–16
- resultative 149, 161, 163, 164, 166, 175, 179, 434, 460, 469
 - construction 44, 158, 302
 - relation/interpretation 43, 58, 67, 72, 216, 223
- resultative verb 145
- rhematization 247
- root serialization 138, 156, 159, 161, 172, 174, 177–181
- Russocentrism 392
- same-subject 65, 110, 111, 263, 295, 314, 350, 467, 488
- sandhi 522
- satellites 321, 323, 324
- scalar sense 60
- scale 5, 7, 70, 223, 392, 405, 470–71, 471
- scope 85–91, 86, 90, 91, 199, 323–324, 338, 505–513, 506
 - integration 506–508, 513
- semantic analysis 57–91
- sentence adverbial 252
- sentence equivalent 78, 137
- sequential relation/interpretation 14, 21, 68, 74
- serial unit 139, 144–146
- serial verb construction 37, 38, 42, 140, 173, 174, 360–362, 362
- simultaneity 64, 87, 88, 97, 107, 109, 124, 130, 142, 160, 165, 166, 203, 216, 218, 223, 244, 245, 321, 354, 446, 451, 449–52, 454
 - limited – 451
- simultaneous relation/interpretation 14, 21, 61, 129, 130, 161, 162, 245, 292, 417, 450
- specification 223
- specificity of meaning 58
- speech act qualifier 83, 206, 226, 301
- spoken language 190, 204, 218, 219, 229, 334, 349
- stage-level predicate 81
- Standard Average European 322, 330
- stative 108
- stress,
 - contrastive – 86
 - sentential – 85, 86
- subject 374, 488
 - dative – 381
 - surface – 31
 - underlying – 31
- subject control 261, 268
- subject-prominence 261
- subjunct 322
- subjunctor 313, 315, 316, 336
- subordination 8, 12–17, 48, 99, 176, 192, 272, 327, 340, 391, 504, 506, 523
 - adverbial – 3, 28
- subordinator 4
- substantivization 243
- substitutive relation 72, 168
- succession 131
- suffix 9
- suffixing preference 9
- superjunct 322
- supplementive adjective clause 48
- supplementive clause 232
- suppletion 114, 337
- switch reference 29, 319, 331, 367–368, 373–406
- symmetry 154
- syndesis 75–78, 202–205, 205, 213, 227

- syndetic linking 262, 268–272
- syntagm 11
- syntax, autonomous – 30

- taxis 97, 99, 244
- telic 221, 305
- temporal abstract 60
- temporal clause 395–398
- temporal interpretation 70, 71, 81–84, 87, 88, 130, 142, 155, 157, 161, 166, 203, 215, 276, 292, 352, 455
- tense 5, 20, 62, 68, 78–81, 80, 126, 139, 141, 194, 291, 441, 445
 - relative – 502–503
- terminal 319
- terminative 165
- terminology 2–3, 20, 45–46
- text cohesion 376
- text sample 191
- thematic roles 208–210
- theme/rheme 262
- time interval 60
- tone 177
 - group 73, 86, 87
 - nuclear – 85, 86
- topic 285, 299, 300, 303
 - double – 277
 - position 16
- topic-prominence 261
- topicalization 171
- transitivization 144
- translative case 78
- truth conditions 68
- typological generalization 3

- umlaut 47
- understood subject 48
- universal concessive conditional clause 481
- universal grammar 1
- utterance meaning 73–85

- vagueness 58, 59–64, 73, 76, 91, 109, 273, 274, 320, 454, 455
- valency 97, 144
- variable position 12, 13, 24
- verb form 4
- verb of motion 44, 424
- verb of perception 157
- verb of speaking 153
- verb phrase 11
- verb serialization 137
 - in a broad sense 144, 145, 146–148, 154, 156, 161, 173, 174
 - in a narrow sense 144, 145, 148–154, 154, 156, 158, 168, 172–174
 - definition of – 139
 - governing – 145, 148
 - modifying – 145, 147, 178, 179
- verbal adverbial 283
- verbal noun 4, 5, 17, 28, 45, 255, 316, 323, 517
- voice 141, 503
- vowel pattern 9

- weather verb 260, 290, 500
- women's speech 475
- word class 4
- word order 73, 74, 91, 109, 205, 284, 285, 297, 303–304, 335
 - clause-internal – 12
 - head-final – 335, 415, 519
 - iconic – 74, 84, 221, 245, 347
 - object-verb – 3, 23, 349
 - phrase-final – 291
 - SOV – 441
 - verb-final – 20, 130, 335
 - verb-object – 23
- world knowledge 83–85, 83, 208, 223
- written language 331, 423

- zero actant 260
- zero, syntactic – 386, 387

Index of languages

- Abkhaz 110
African languages 403
Akkadian 545
Alamblak 177–181, 183
Albanian 9, 49
Altaic languages 336, 375, 441, 448, 461, 462, 482, 503
Altay 105, 341
Amele 24, 25
Amharic 342
Arabic 48, 341, 423
Archi 439
Armenian 545
Australian languages 2, 19, 48, 384
Austroasiatic languages 518, 519
Austronesian languages 137, 138, 144
Avar 44
Avestan 545
Azerbaijani 334, 337, 340, 341, 545
- Balti 488
Bashkir 98–100, 330, 331, 341, 377, 545
Basque 4
Bengali 128, 129, 493, 519, 545
Bulgarian 19, 30, 34, 36, 275, 545
 Volga Bulgarian 341
Burushaski 9, 41, 90, 487–519, 522–525
Buryat 112, 119, 120, 123, 378, 545
- Catalan 15
Celtic 204
Chaghatay 330, 334, 341
Chechen 131
Chickasaw 41, 42, 45
Chinese 37, 137, 138, 143–146, 148–152, 171–173, 277, 360, 518
 Classical Chinese 143
Chukchi 2, 9, 104, 115, 116, 131, 545
Chuvash 324, 326, 336, 341, 342, 545
Creole languages 137, 144
Czech 117, 118, 127, 128, 255, 258, 261, 275, 278, 545
 Old Czech 275
- Dani 180, 183
Diyari 2
Dolgan 341
Dravidian languages 49, 137, 175, 313, 415, 498, 503, 508, 510, 513, 517–519, 522, 545
Dumaki 487, 518
- East Asian languages 143–145
English 8, 20, 28–30, 32–34, 36, 38–40, 45, 47–49, 57–65, 72, 76–78, 80–83, 85, 89–92, 103, 106, 128–130, 132, 138, 172, 173, 189–230, 245, 251, 252, 257–262, 266, 268, 272–74, 276, 277, 296, 297, 314, 341, 355–357, 361, 362, 364–367, 373, 376, 404, 407, 408, 417, 433, 507, 523, 545
Eskimo 112–118, 121, 122, 125–127
 West Greenlandic Eskimo 5
Estonian 102, 104, 108, 110, 123, 128–131, 545
Even 448, 453
Evenki 6, 28, 58, 75, 82, 107, 109, 112, 114, 116–118, 120, 121, 126, 131, 441–463, 546
- Finnish 76, 78, 92, 264, 507, 508
Finno-Ugrian languages 109, 283, 546
Fore 114
French 9, 11, 16, 19, 30–35, 39, 40, 45, 57, 58, 62, 63, 65–72, 74, 76–79, 83, 85, 89, 92, 128, 129, 131, 257–259, 262, 267, 268, 272–275, 278, 314, 332, 342, 546
- Gagauz 341, 417, 422, 546
Galician 546
German 57, 62, 63, 72, 73, 91, 102, 128, 129, 192, 214, 546
Germanic languages 72, 192, 214, 231, 240, 251, 252, 257, 261, 262, 268, 272–274, 277, 355
Greek 546
 Classical 2, 5, 17–19, 48, 128–130, 265, 422, 519, 524
 Modern 1, 19, 45, 49, 128, 129, 422

- Hindi(-Urdu) 2, 16, 30, 32, 33, 35, 57, 59, 65,
 72, 74, 77, 91, 109, 128, 129, 131, 329,
 499, 508, 510, 513, 524, 546
 Hmong 137, 153
 Hopi 114
 Hua 155, 182
 Hungarian 16, 283–308, 546

 Icelandic 192
 Indo-Aryan languages 487, 498, 503, 508, 510,
 513, 517, 519, 522, 546
 Indonesian 518
 Iranian languages 334, 487, 518
 Italian 8, 11, 45, 49, 57–59, 62, 65, 66, 72, 76,
 77, 85, 89, 128, 129, 272, 546

 Jabêm 137, 138, 147–153, 176, 177
 Japanese 12, 17, 26, 44, 49, 57, 58, 90, 109,
 115, 138, 141, 154, 155, 160–165, 313, 329,
 374, 415, 465–482, 493, 508
 Classical Japanese 177
 Jiwarli 19, 48

 Kalam 177, 180, 183
 Kannada 17
 Karachay-Balkar (Karachai) 110, 341, 462, 546
 Karaim 342
 Karakalpak 341
 Karakhanid 337, 341
 Kashghai 334, 341
 Kazakh 341, 546
 Khalaj 334, 337, 341
 Khakas 341
 Khmer 137–139, 145, 146, 148, 149, 151–153
 Khovar 488, 493, 518
 Kipchak
 Old Kipchak 341
 Kirghiz 315, 326, 329, 341, 487, 546
 Komi 546
 Korean 2, 58, 100, 102, 108, 126, 131, 313,
 415, 493, 546
 Kumyk 7, 15, 23, 26, 40, 41, 341, 546
 Kwa languages 137, 144, 151

 Ladakhi 488
 Lahu 137, 173
 Latin 2, 5, 17, 18, 19, 27, 45, 48, 49, 58, 130,
 132, 230, 232, 265, 276, 422, 546

 Latvian 546
 Lezgian 9, 10, 13, 28, 38–41, 43, 48, 58, 91,
 415–437, 438, 454
 Limbu 43
 Lithuanian 2, 10, 102, 104, 105, 113, 117, 118,
 130, 264, 265, 546

 Macedonian 546
 Malayalam 128, 129, 175,
 Manchu 58, 109, 110, 441, 446, 546
 Mari 58, 107, 546
 Methei 41
 Moldavian 546
 Mongolian 40, 46, 58, 109, 110, 115, 117, 119,
 313, 329, 375, 406, 415, 488, 510, 546
 Classical Mongolian 141, 142
 Khalkha Mongolian 1, 100, 138, 154,
 165–171
 Mordvin 546
 Munda languages 517, 519
 Muskogean languages 41, 42

 Nakh-Daghestanian languages 13, 48
 Nanai/ Gol1di 441
 Negidal 448, 453
 Nenets 546
 Nepali 41
 Nivkh 58, 97, 100–102, 107–112, 115–117,
 126, 127, 131, 329, 374, 546
 Nogay 341
 Norwegian 63
 Nuristani languages 517

 Oghuz languages 363
 Oriya 519
 Oroch 441, 453

 Paamese 137
 Pali 546
 Pamir-Iranian languages 518
 Pashto 517, 518
 Permian 546
 Persian (Tajik) 128, 129, 334, 487, 489, 517
 Papuan languages 177, 403
 Polish 19, 30, 33–35, 46, 57, 240, 245, 255,
 256, 258, 260, 275–277, 546
 Old Polish 275

Portuguese 1, 5, 45, 546

Purik 488

Quechua

Ancash Quechua 373

Huallaga Quechua 2, 9, 29

Romance languages 58, 132, 190, 260, 262,
273, 277, 426, 546

Rumanian 45, 128, 129, 546

Russian 3, 10, 11, 13, 19, 30, 33, 35, 38, 39,
44, 46–49, 57, 58, 61, 72, 75–77, 80, 82,
85, 87–89, 91, 98, 100, 101, 103, 104,
108–111, 115–118, 124, 125, 127–131, 138,
172, 173, 190, 239–276, 332, 341, 349, 373,
375, 391–393, 402, 404, 407, 417, 423, 434,
441, 447, 546
Old Russian 27, 113, 249, 264–267,
270–272

Sanskrit 46, 49, 508, 522, 546

Vedic Sanskrit 34

Serbo-Croatian 255, 258, 261, 275, 547

Shina 488, 493, 496, 518

Shor 547

Slavic languages 58, 76, 108, 109, 251, 252,
255, 257, 259, 261, 262, 271–274, 277,
314, 334, 547

Slavonic

Old Church Slavonic 113, 240, 249, 264,
274, 524

Solon 448, 453

Southeast Asian languages 140, 143–145, 152

Spanish 11, 27, 43, 45, 57, 72, 81, 82, 85, 128,
129, 426, 432, 547

Swahili 5, 22

Swedish 72, 73

Tabasaran 439

Tajik 334, 517, 547

Tamil 41, 43, 44, 58, 90, 109, 131, 138, 141,
154, 156–160, 173, 175, 329, 499, 547
Classical Tamil 174, 175

Tatar 341, 377

Tauya 20, 21

Telugu 17, 128, 129

Thai 137, 147, 152, 153

Tibetan 173, 487, 488, 493

Tibeto-Burman languages 41, 43, 173, 374,
487, 503, 517–519

Tsakhur 439

Tungusic (Manchu-Tungusic) languages 46,
313, 318, 329, 374, 375, 406, 415, 441, 446,
453, 457, 461, 462

Turki

Volga Turki 341

Turkic languages 46, 48, 49, 58, 109, 313–339,
341, 349, 356, 363, 374, 375–378, 384,
391–395, 402, 405, 406, 415, 418, 487, 508,
510, 517–519, 522, 547

Old Turkic 317–319, 325, 336–338, 342

Turkish 9, 38, 43, 44, 48, 58, 128, 129, 155,
176, 313–318, 322–324, 326, 327, 332–335,
337–341, 349–368, 375, 384, 510, 547

Old Turkish 349, 510

Ottoman Turkish 332, 334

Old Ottoman Turkish 341

Turkmenian 23, 98, 341, 547

Tuva(n) 48, 324, 326, 328, 331, 340, 341, 342,
373–406, 407, 408

Udehe 441

Udmurt 8, 14, 15, 40, 58, 107, 547

Uighur

Old Uighur 318, 319, 325, 328, 341

New Uighur 341, 377, 487

Uilta/ Orok 441, 446, 453

Ukrainian 547

Ul'cha 441

Uralic languages 415, 519

Urdu 487, 489, 518

Uzbek 110, 326, 334, 341, 342, 377, 547

Vietnamese 137, 139, 140, 152, 153

Wakhi 487

Yakut 114, 116–119, 318, 324, 340, 341,
376–378, 441, 547

Yiddish 192

Yimas 177, 179–181, 183

Yoruba 37, 42, 138–140, 147–152, 172